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TECHNICAL REPORT

# Assessing Operation Purple

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## A Program Evaluation of a Summer Camp for Military Youth

*Anita Chandra • Sandraluz Lara-Cinisomo • Rachel M. Burns • Beth Ann Griffin*

Sponsored by the National Military Family Association



Center for Military Health Policy Research

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## Preface

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The goal of this study was to evaluate the Operation Purple® camp program, a free summer camp provided to military children and adolescents who experience parental deployment. Since the start of the wars in Afghanistan and Iraq a decade ago, such military family support programs have proliferated. However, there has been little evaluation of whether these programs are meeting their key objectives. This study endeavored to understand how the Operation Purple summer camp program, a popular camp for military youth, helps youth learn about military culture, connect with other military peers, and learn how to cope with the stress associated with parental deployment. The study used a quasi-experimental design, with a combination of youth and parent survey data and camp after-action reports, to answer key questions about whether the camp has met its core objectives. It also compared a sample of youth who attended the camps with those who did not during the summer of 2011. This report should be of interest to a range of researchers, policymakers, and youth program leaders involved in improving military support programs.

This research was sponsored by the National Military Family Association and conducted jointly by RAND Health's Center for Military Health Policy Research and the Forces and Resources Policy Center of the RAND National Security Research Division (NSRD). The Center for Military Health Policy Research taps RAND expertise in both defense and health policy to conduct research for the Department of Defense, the Veterans Health Administration, and nonprofit organizations. RAND Health aims to transform the well-being of all people by solving complex problems in health and health care. NSRD conducts research and analysis on defense and national security topics for the U.S. and allied defense, foreign policy, homeland security, and intelligence communities and foundations and other nongovernmental organizations that support defense and national security analysis.

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## Summary

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Over the past decade, research has highlighted the challenges that parental deployment can pose for the health and well-being of youth from military families. Cumulative months of parental deployment and associated stressors can have negative consequences for youth (De Pedro et al., 2011; Flake et al., 2009; Chandra, Lara-Cinisomo, et al., 2010; Chandra, Lara-Cinisomo, et al., 2011; Cozza, 2011) and for parents (Chartrand et al., 2008; Lara-Cinisomo et al., 2012). Although most military youth can navigate these experiences with little or no negative impact, these changes can cause distress among some youth. Studies from recent conflicts indicate that around one-third of children of deployed parents face higher levels of emotional difficulties and anxiety symptoms than youth in the general population (Flake et al., 2009; Chandra, Lara-Cinisomo, et al., 2010; Lester, Peterson, et al., 2010; Lester, Mogil, et al., 2011; Lester, Saltzman, et al., 2012; Chandra, Lara-Cinisomo, et al., 2011; Cozza, 2011). In addition, some military youth have reported challenges to the quality of peer and parent-child relationships (Huebner and Mancini, 2005) and academic problems, particularly those who have experienced 19 months or more of parental deployment (Richardson et al., 2011; Chandra, Martin, et al., 2010).

To address these emotional, social, and academic issues, the U.S. Department of Defense (DoD) and youth and family program leaders have developed a sizable number of programs intended to prevent or mitigate the impacts of parental deployment. Yet, there has been comparatively little effort to evaluate these programs. In light of recent research emphasizing priority issues for youth, the salient questions now are whether these programs are effective and whether existing programs are realizing their intended objectives. While there are several initiatives serving military youth, such as Operation Military Kids and Operation Purple® (the focus of this report), there has been very little independent evaluation of these programs. RAND has completed studies of Operation Purple camp applicants, but the focus to date has not been on program evaluation (Chandra, Burns, et al., 2008; Chandra, Burns et al., 2011).

This study sought to address this gap by evaluating Operation Purple, a summer program for military youth whose goals include helping youth cope with the stress associated with parental deployment. In 2004, the National Military Family Association (NMFA) began to address the need for support programs for this population, launching Operation Purple, a free, weeklong summer camp program for youth who have a deployed parent. During their stay, participants engage in a variety of fun activities while learning how to cope with the stress associated with the deployment of their parents. The curriculum for Operation Purple focuses on four themes, three of which (communication about feelings, military culture, and sense of service) focus on aspects of helping youth feel connected to the military and equipping them

with the tools to cope with deployment-related stress. The fourth theme, engagement in outdoor activities, may have collateral benefits for youths' sense of calm.

## Study Approach

The evaluation presented here had two objectives: (1) to assess whether Operation Purple is associated with self-reported improvements in the four main camp outcome areas (communication skills, understanding of military culture, sense of service, and outdoor education), which correspond to the four themes described earlier by comparing youth who attended the camp with those who applied but did not attend, and (2) to document how the 2011 curriculum was implemented by participating camps, using data from after-action reports (AARs) and visitor logs (VLs).

To address the first objective, the evaluation used a quasi-experimental design to track the effects of the camp on the four main outcome areas from the perspectives of participating children and adolescents (referred to as "youth" throughout this report) and their parents or primary caregivers (referred to as "parents" for simplicity) through a series of self-reported surveys administered before and at two time points after camp participation. While an experimental design would have been desirable for exploring causality and minimizing sample bias, randomization was not possible given the way that camp eligibility and acceptance were determined and NMFA's interest in retaining that approach (Rossi and Freeman, 1993; Bawden and Sonenstein, 1992). NMFA prioritizes acceptance for those youth who have an impending parental deployment and have not attended the camp in prior years. Thus, we identified a control group comprising youths who had applied but did not attend camp (because they either were not accepted or were accepted and did not attend) and created propensity score weights to adjust for the differences in baseline characteristics between the youth who attended an Operation Purple camp (the intervention, or camp, group) and those who did not (the comparison, or no-camp, group): applicant age, applicant gender, deployed parent's service and component (active versus National Guard or reserve), parental deployment status while the youth was at camp (or during the same period), number of deployments, camp attendance prior to 2011, receipt of any other (non-Operation Purple) military support or services during the study period, and all baseline survey items for outcomes of interest.

Data on the outcomes for the analysis of the first study objective (assessing the impact of camp participation) came from self-reported, web-based surveys conducted at three time points: during application (wave 1, or baseline), one month post-camp (wave 2), and three months post-camp (wave 3). The surveys were administered to both the youth and parent, with the same parent reporting in all waves. Fifty-seven percent of parents and 40 percent of youth who completed the baseline survey also completed the wave 2 survey. Fifty-five percent of parents and 50 percent of youth who completed the baseline survey also completed the wave 3 survey. These response rates are somewhat lower than those in other studies of similar populations (Chandra, Lara-Cinisomo, et al., 2011; Lester, Mogil, et al., 2011); however, this was a web-based survey, a method that generally has a lower response rate than other survey dissemination methods (median rate of 34 percent) (Bälter et al., 2005; Shih and Fan, 2008). After assessing the impact of camp on attendees, we carefully examined the effects on outcomes among first-time camp attendees using a smaller subset of camp applicants who had never attended an Operation Purple camp before 2011 to determine whether the program

had a greater impact on this particular subsample of youth. Analyses also included qualitative data based on open-ended questions completed by respondents.

To assess our second study objective, we used data from Operation Purple AARs and VLs to measure how well the camps aligned with the program's themes and implemented required activities.

The AARs, completed by the camp directors, documented whether the four outcome areas were addressed, whether the required activities were carried out, and the activities that a given camp used to reinforce the four program components. These reports did not capture youth attendance at a given activity. The VLs provided information on the fidelity of implementation of two key activities: conservation and recycling ("Leave No Trace") and military education and pride via the "Wall of Honor," a collage that is created by camp participants to illustrate military pride. The VLs were completed by an outside, trained observer. Camp visitors (those completing the VL) were required to view a recorded webinar that reviewed expectations for their visit, the role they play in visiting camp, an overview of the camp curriculum and activities, and reporting procedures. The visitor selected the time and day of the observation but was encouraged to conduct the visit in the middle of the week to capture a more typical day. We did not assess inter-rater reliability because of a lack of project resources, and there were no quality assurance measures.

There was significant variation in the quality of information provided by camp directors in the AARs with regard to the extent to which activities were implemented. As a result, we relied on the information provided in the AARs to capture in a dichotomous way whether or not the required Operation Purple curriculum was implemented and, when possible, the frequency of specific activities related to the four required themes of the camp (communication skills, understanding of military culture, sense of service, and outdoor education). Our analyses relied on the VLs to provide a more objective measure of program fidelity, which involved a trained (outside) observer. However, while specific activities were observed during camp visits and mentioned in the VLs, the length of observation time spent by an observer was not reported in a standardized way, and the amount of information reported by the observers varied, making it difficult to reliably use that information.

## Key Findings

### Sample Characteristics

At baseline, we had 977 parent-child pairs. Of this set, 387 youth completed waves 1 and 2 of the survey, 491 youth completed at least waves 1 and 3, 560 parents completed waves 1 and 2 of the survey, and 542 parents completed at least waves 1 and 3.

Most of our sample came from Army families: Approximately 52 percent of the baseline sample came from the Army, 19 percent came from the Navy, 17 percent came from the Air Force, and 11 percent came from the Marine Corps. Approximately three-quarters (76 percent) of the sample came from the active component, with the rest from the reserve component (14 percent National Guard and 10 percent reserve). Fifty percent of the youth sample was female, with an average age of 11.0 years (standard deviation [SD] = 2.2). About 60 percent of the youth sample had experienced three or more parental deployments. Thirty-nine percent had attended Operation Purple before 2011, while the remaining group had never attended the camp before. For the purpose of our evaluation, 44 percent attended in 2011 (and served as our

camp group); the remaining group formed the no-camp, or control, group. We accounted for camp attendance prior to 2011 in all of our analyses.

### **Communication About Feelings**

One of the key principles of Operation Purple is that the camp will offer a safe and nurturing space for youth to discuss their feelings about parental deployment and military life and will provide youth with tools to explore those feelings thoughtfully, through journal writing or other expressive modes. On the one hand, there were no significant differences in communication comfort from the youth perspective between those who attended the camp in 2011 and those who did not. On the other hand, at the first follow-up assessment, parents whose children attended the camp in 2011 reported significantly greater improvement relative to parents in the no-camp group in terms of the youth's ability to make himself or herself feel better (38 percent of camp parents endorsed the item with higher confidence at wave 2 than at baseline versus 25 percent of no-camp parents), as well as in their sense of efficacy in helping their child feel better (27 percent of parents endorsed this item with higher confidence at wave 2 than at baseline in the camp group versus 15 percent of no-camp parents). At both follow-ups, parents in the camp group also reported greater improvement in interactions with the youth about how he or she was feeling (37 percent improved in the camp group versus 25 percent in the no-camp group at wave 2; 38 percent in the camp group versus 27 percent in the no-camp group at wave 3).

Results from the open-ended questions posed to camp participants and their parents one month after camp showed that a small number (31 out of 270 parent respondents and 14 out of 175 youth respondents) experienced some benefits associated with communication. For example, parents reported that their child was more willing and able to describe his or her feelings about being a military youth and about parental deployments.

Finally, results from the AARs revealed that, while all camps reported engaging youth in activities designed to promote the communication of feelings in verbal and nonverbal ways, only nine of 32 camps indicated that they conducted these activities on a daily basis. While camps were expected to include activities in the communication theme area, there was no expectation regarding how many activities were to be offered and on how many days of camp.

### **Military Culture and Connection to Military Peers**

Another core theme of Operation Purple camps is educating youth about military culture and fostering a sense of community in which military peers can connect with each other. Overall, there were no significant differences in comfort and understanding of military culture between youth who participated in the camp and those who did not; however, significantly more camp attendees reported having spoken with at least one servicemember outside their family at wave 2 (36 percent camp versus 21 percent no camp). There was a similar difference in terms of parents' reports that their child felt a sense of community. Twenty-seven percent of camp parents reported that their child felt a greater sense of community at the first follow-up relative to the baseline, compared with 16 percent of no-camp parents.

The findings from the qualitative data (i.e., open-ended questions) showed similar results. Thirty-one of 270 parents who responded to the open-ended question about the benefits of camp attendance reported that the camp helped their child become more familiar with military culture.

Among the four targeted themes, military culture was the least discussed in the AARs. Despite the amount of data available, the range of activities that reinforced this theme varied widely. The site visits targeted this area specifically. The results from our analysis of the VLs indicated that ten of the 28 observed sites did not fully implement the required activity.

### **Sense of Service/Stewardship**

A third theme of the camp was to instill a sense of service among the youth and a commitment to community contribution, defined as helping peers or others. There was no significant difference between campers and non-campers with respect to self-reports of trying to help people in need and helping other military youth who may need help. This was true of reports from both youth and parents.

While there were no changes noted in the quantitative survey data, results from the qualitative data analysis (i.e., open-ended items included in the survey) indicated that, among those who responded to the open-ended questions, eight youth and 30 parents observed improvements in the youth's sense of stewardship as a result of camp attendance.

According to data extracted from the AARs, camps were able to promote the concept of stewardship, as defined by Operation Purple, through several practical and creative activities, such as writing letters to servicemembers. The VLs did not capture the stewardship component of the program.

### **Outdoor Education**

A fourth theme was engaging youth in outdoor activities, which included education about the environment and related conservation topics, as well as a general appreciation of being outdoors. There were no significant differences between campers and non-campers in terms of appreciation of the outdoors.

Based on information gathered from the AARs, all camp directors reported at least one activity associated with Leave No Trace principles (or conservation and environmental preservation principles) and outdoor education. Results from the analyses using data extracted from the VLs support the variation reported in the AARs. However, observers noted that some camps either did not fully adhere to the required activity or simply did not implement the activity during the observation period.

## **Youth and Parent Reporting on the Benefits of Operation Purple Camps**

Based on responses to the open-ended question posed to youth and parents in waves 2 and 3 about how Operation Purple camps help youth and parents, we found that there were potentially unintentional or secondary benefits to camp participation. Specifically, 25 percent of parents who responded to the open-ended question said that they observed that their child was more confident after attending an Operation Purple camp; fifteen youth also pointed to this secondary benefit in their responses. Other benefits included a sense of independence among participating youth. Specifically, 20 parents said that their child returned from camp behaving more independently than prior to camp attendance. The third benefit that emerged from the data was improved coping skills. Twenty percent of parents and 28 percent of youth said that the youth felt better equipped to cope with stress related to deployment as a result of camp participation. Finally, 20 parents said that Operation Purple camp gave their child an oppor-

tunity to take a break from the responsibilities and stress that comes with being a child of a parent in the military.

## Concluding Observations

The evaluation of Operation Purple reveals that, from the parents' perspective, the program had some impact on youth comfort and ability to communicate about deployment-related stress. Given recent studies of military youth highlighting deployment-related stress and anxiety symptoms, this finding is important even though it was noted only by parents because being able to communicate about stress and feelings of anxiety is critical to addressing those symptoms (Stallard, Velleman, and Baldwin, 2001). Any signal of improvement in this area is important. For other camp areas, effects were not detected or were minimal.

These findings must account for the limitations of the study. Because we were unable to use random assignment, and because propensity score weights only control for differences between the camp and no-camp groups on observed characteristics, it is possible that unobserved baseline differences between our two groups may be biasing our results. For example, while we controlled for observed differences in baseline parent responses to the survey measures in our propensity score model, it may be that an unobserved key difference (such as level of engagement in the youth's life) may not be balanced between the camp and no-camp groups and that this difference, in turn, explains the finding derived from the parent responses. Informed by prior military family research (Chandra, Lara-Cinisomo, et al., 2011; Lester, Mogil, et al., 2011; Flake et al., 2009), we included many of the military and deployment characteristic variables, as well as camp participation factors, that may have affected the camp experience of 2011 participants and are associated with relevant outcomes, such as military connectedness and communication about stress. However, we did not have complete deployment history data, which have been critical in prior military family studies and could have been instrumental for propensity score weighting. We were also limited in our ability to construct a camp fidelity measure. While we attempted to use the AAR and VL data, the quality and validity of those data and the inability to conduct an independent assessment of camp implementation (based on resource constraints) hindered the extent to which we could incorporate these fidelity data in our analytic models. We used the AAR and VL data to contextualize our findings, but we acknowledge that a more complete implementation analysis would have strengthened our design. Finally, we note that youth who apply to camp (regardless of attendance) may already be distinct from other military youth, thus limiting our ability to generalize to the broader military youth population.

In spite of these limitations, this study fills an important gap in the military youth program evaluation research because it involved a rigorous quasi-experimental approach and used qualitative data to put findings into context and to highlight other potential benefits of programs like Operation Purple, which provide a safe and nurturing space for military youth to connect and share feelings about parental deployment. Our qualitative data showed that several youth and parents reported that campers experienced increased confidence and a sense of independence one month after camp (e.g., social and personal growth), items that were not explicitly measured in the quantitative surveys. Future studies should examine these other benefits. Further, our statistically significant findings associated with parents' responses suggest that there may be a "parental reprieve" effect (i.e., parents are better able to relate to youth

after camp because they had a “break”); this should be examined in more detail. In addition, while this study focused on whether youth learned new skills in the four camp theme areas, additional research could examine whether this skill development translates to actual reductions in stress levels or anxiety symptoms related to parental deployment. Finally, analyses of camp implementation that include a more direct investigation of the type, frequency, and barriers to specific activity implementation could help explain why certain effects surfaced in this study and how camp processes could be improved to have a greater impact in the four camp theme areas.





## Acknowledgments

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## Abbreviations

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AAR	after-action report
ASMD	absolute standardized mean difference
CCSC	Children's Coping Strategies Checklist
DoD	U.S. Department of Defense
FOCUS	Families Overcoming Under Stress
GBM	generalized boosted model
HICUPS	How I Coped Under Pressure Scale
NMFA	National Military Family Association
NSRD	RAND National Security Research Division
SD	standard deviation
VL	visitor log



## Introduction

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This report presents findings from an evaluation of the Operation Purple® summer camp program, a popular camp for military youth in which they learn about military culture, connect with other military peers, and learn how to communicate about the stress associated with parental deployment. The study used a quasi-experimental design, with a combination of youth and parent survey data and camp after-action reports (AARs), to answer key questions about how the program met its core objectives, comparing a sample of youth who attended camp during the summer of 2011 with youth who did not. In this chapter, we describe the context of the study, including the need for military youth program evaluation. We also provide detail about the core components or themes of Operation Purple camps, which framed our evaluation approach.

### Overview

Over the past decade, a growing body of research has highlighted concerns surrounding the negative impact of parental deployment on military youth (Flake et al., 2009; Chandra, Lara-Cinisomo, et al., 2010; Chandra, Lara-Cinisomo, et al., 2011; Lester, Peterson, et al., 2010; Lester, Mogil, et al., 2011; Lester, Saltzman, et al., 2012). Consequently, numerous programs have been created both inside and outside the U.S. Department of Defense (DoD) to address or prevent these impacts. However, to date, there have been few attempts to use the research results to inform program practices or to determine the extent to which programs can address priority needs. As the research on military families has crystallized around some common themes, the question now is whether particular programs are effective and are achieving their intended goals. In light of increasing national resource constraints, program evaluation is critical to understanding the effectiveness of interventions and other initiatives, determining which programs to fund and at what level, and assessing the context in which specific programs work and for which populations (U.S. General Accounting Office, 2000; Office of Management and Budget, 2009). Despite this recognition, there have been relatively few military family program evaluations, and there has been even less formal evaluation of programs serving the needs of military youth.

In the remainder of this chapter, we briefly summarize what is now known about the stress of deployment on children and parents in military families (for a more in-depth discussion, see Chandra, Burns, et al. 2008; Wadsworth and Riggs, 2011; Hosek, 2011; and Chandra, Lara-Cinisomo, et al., 2011) and the need to evaluate programs for military youth and families. We then describe one military youth program, Operation Purple, and detail the

core principles of the program. This background lays the foundation for our approach to evaluating the program, described in subsequent chapters.

## **Military Youth and Deployment-Related Stress**

As of 2011, there were close to 2 million children with one or both parents in the U.S. military (active or reserve component; DoD, 2011), and more than 800,000 parents have experienced at least one deployment to Afghanistan and/or Iraq (Glod, 2008). Deployment and its associated stressors have been shown to have some negative consequences for children (De Pedro et al., 2011; Flake et al., 2009; Chandra, Lara-Cinisomo, et al., 2010; Chandra, Martin, et al., 2010; Chandra, Lara-Cinisomo, et al., 2011; Cozza, 2011) and for parents (Chartrand et al., 2008; Lara-Cinisomo et al., 2012). Although military youth can commonly weather these events with little or no negative impact, changes associated with parental deployment can disrupt family roles and routines, causing distress among family members. Studies from recent conflicts highlight that approximately one-third of children of deployed parents face higher levels of emotional difficulties and anxiety symptoms than youth in the general population (Flake et al., 2009; Chandra, Lara-Cinisomo, et al., 2010; Lester, Peterson, et al., 2010; Lester, Mogil, et al., 2011; Lester, Saltzman, et al., 2012; Chandra, Lara-Cinisomo, et al., 2011; Cozza, 2011). For example, Chandra, Lara-Cinisomo, et al. (2011) found that 34 percent of youth aged 11–14 years reported moderate to high levels of emotional difficulties (compared to 19 percent of civilian youth), and 30 percent of 11- to 17-year-olds reported elevated anxiety symptoms (compared to 15 percent of youth, on average, in civilian studies). Additionally, some of these youth have reported challenges to the quality of peer and parent-child relationships (Huebner and Mancini, 2005) and academic problems, particularly those who have experienced 19 months or more of cumulative parental deployment (Richardson et al., 2011; Chandra, Martin, et al., 2010). In addition to these stressors, military children, particularly those from National Guard or reserve families, report difficulties from the lack of understanding or awareness of military culture in the communities in which they live, as well as limited military peer networks (Chandra, Burns, et al., 2008; Chandra, Lara-Cinisomo, et al., 2011). Interventions that address these challenges and support children in military families are critically needed to facilitate successful transitions to adulthood.

## **Deployment and Its Effects on Parenting**

Deployment can also have a negative impact on the nondeployed caregiver or parent, including effects on parenting stress (Gibbs et al., 2007; Gewirtz, Polusny, et al., 2010), and research has found associations with parent-child relationship quality. A recent study noted that nondeployed female parents and caregivers reported growing household demands, including managing parenting responsibilities, and noted differences by service and component (Lara-Cinisomo et al., 2012). Lara-Cinisomo and her colleagues (2012) also found that parents and caregivers affiliated with the Navy and National Guard had poorer emotional well-being than Army and active-duty caregivers, respectively. Spouses of deployed servicemembers are also at risk for depression and other emotional problems (Mansfield et al., 2010)—challenges that are known to affect parenting (Chandra, Lara-Cinisomo, et al., 2010). In a study of school staff

perspectives, school teachers and counselors observed that parents who appeared to be struggling emotionally had greater difficulties attending to their children's academic and behavioral health, including participating in parent-teacher meetings and helping children complete homework on time (Chandra, Martin, et al., 2010).

These recent studies highlight the impact that deployment can have on nondeployed parents and the potential consequences for parenting, which, in turn, can have negative implications for children and youth. In fact, one study found that poor parent-child communication was associated with poorer youth functioning (Chandra, Lara-Cinisomo, et al., 2010). To prevent such outcomes, DoD has made efforts to provide support to parents and families. Military bases offer parents reprieve by providing child-centered activities. However, parents who do not reside near a base may not be able to take advantage of such programs, and this may be especially true for National Guard and reserve families (Werber et al., 2008; Miller et al., 2011). Military parents have requested more assistance in identifying and attending to their children's emotional health but currently have limited tools to achieve this. Further, parents often request temporary respite from child-care duties, which may be achieved through camp programs, such as Operation Purple (Lara-Cinisomo et al., 2012; Chandra, Burns, et al., 2011). In the context of this report, we explore how a particular camp program, Operation Purple, may help improve parent relationships with youth, especially in the area of communication about issues related to deployment stress.

Research focusing on military families during previous conflicts indicates the importance of social support networks and programs for coping with deployment-related stress (Patterson and McCubbin, 1984; Raschmann, Patterson, and Schofield, 1989). For example, Wood, Scarville, and Gravino (1995) found that social support networks of family and friends were essential to the adjustment of families of U.S. Army soldiers who were deployed for six months. They also found that participation in family support groups was an important factor among families that successfully adjusted to the deployment. Hiew (1992) found that Canadian children of deployed fathers were less likely to exhibit "acting out" behavior in the classroom when they had used social support coping strategies (e.g., seeking out peer or adult support) rather than problem-focused coping or emotion-focused coping (e.g., getting angry). These findings can inform the development of interventions for children with deployed parents.

## **The Need for Military Youth Program Evaluation**

While existing studies have highlighted the need for social support programs and interventions for military families, there has been a lack of research identifying the most beneficial programs and interventions for this population. Further, there has been relatively little attention to the benefits of youth programs, particularly given the more recent emphasis in DoD on providing services for military children. In a study of programs addressing the mental health needs of servicemembers, researchers found that less than one-third of programs offered by the military services had conducted an evaluation of their target outcomes in the 12 months prior to the study (Weinick et al., 2011). To our knowledge, there have been no systematic studies of the impact of military youth programs. In fact, it is unclear how many programs are being offered to military families and youth, particularly those not funded by DoD. With no centralized information on the implementation practices and targeted outcomes of such programs, it is difficult to determine the exact number of youth receiving services, whether the services are



evidence-based, or whether they are achieving the desired outcomes. We also do not know the degree to which camps target specific child outcomes, including interpersonal skills (e.g., communication of feelings) and personal development (e.g., development of confidence).

Two recent studies examined the implementation of a program called Families Overcoming Under Stress, or FOCUS, a military family-centered resiliency training program that draws from evidence-based interventions (Beardslee, Lester, et al., 2011; Lester, Peterson, et al., 2010; Lester, Mogil, et al., 2011; Lester, Saltzman, et al., 2012). Lester, Mogil, et al. (2011) evaluated the effectiveness of FOCUS. They found marked improvement in child emotional and behavioral distress, as well as prosocial behaviors, before and after program implementation. Children who participated in FOCUS also reported using more positive coping strategies at the post-assessment (Beardslee, Lester, et al., 2011; Lester, Mogil, et al., 2011). However, it should be noted that the four FOCUS studies employed evaluation designs with no control or comparison group. Furthermore, despite these findings, little is known about the effectiveness of the vast number of programs targeting military youth and the impact that programs are having on this group.

The gaps in the literature on program evaluation might be explained by several factors. First, programs work in silos that make it difficult to collaborate with agencies and service providers who can contribute to their assessment and thus to building a more comprehensive picture of what is known about program effectiveness (Weinick et al., 2011). Second, the funding available to evaluate programs is often limited. Third, programs may target multiple family members, making it challenging to determine the programs' impact on children, specifically. For example, programs may offer services that target the servicemember or parent and thereby have indirect benefits for the child, which may not be easily assessed. Program development and implementation can take a significant amount of time, thus limiting the staff's ability to participate fully in evaluating the effectiveness of the services they are providing (Patton, 2011). Sometimes, programs are assessed but evaluation findings are not openly disseminated, a practice that limits the sharing of lessons learned with those who are developing and implementing programs for comparable populations (Administration for Children and Families, 2010).

## **Current Landscape of Military Youth Programs**

Many programs have been developed at the local, state, and national levels, as well as in DoD, to address the needs of military children and families. (See Weinick et al., 2011, for an account of programs offered, by service, to servicemembers, veterans, families, and children.) For example, DoD offers child and youth services designed to alleviate some of the emotional, physical, and social stressors associated with parental deployment (DoD, 2011; Weinick et al., 2011). The DoD-run website Military OneSource contains vast amounts of information about parenting, child health and development, and children's mental health and well-being. Guidance on handling homework and arranging for tutoring, as well as information on school selection and transitions, readiness, and parent-school involvement, is available for parents. The services' child and youth support organizations offer information for children about deployment-related stress. The National Guard Family Program has a website that connects military students to their school administrators, teachers, and coaches, and the Army's Operation: Military Kids provides links to state-specific resources for military children. The Military Child Education Coalition has developed several programs (e.g., Student 2 Student, Living in the New Normal)

targeted at improving academic outcomes for military children. Military Youth Centers, sponsored by the Boys and Girls Clubs of America, offer educational outreach and after-school programs for military children. Finally, the National Military Family Association (NMFA) has established the Operation Purple program, which includes a summer camp. In the following sections, we describe this program and its core components.

## **Operation Purple Camp**

In 2004, NMFA began to address the need for support programs for children, launching Operation Purple, a free, weeklong summer sleepaway camp program for youth who have a deployed parent. During their stay, campers engage in a variety of fun activities while learning how to cope with the stress associated with the deployment. The goal of the camps is to bring together youth who are experiencing some stage of a deployment and the stress that goes along with it. Operation Purple camps are designed to offer youth the coping skills and support networks of peers to better handle life's ups and downs. Key activities include team-building, community service projects, and military-themed exercises.

In 2011 (the time of this study), there were more than 41 weeks of camps held at 33 locations in 25 states and Japan. Generally, existing camps (e.g., 4-H, Girl Scouts) submit proposals to NMFA to be considered as an Operation Purple campsite. NMFA provides information on the availability of the camp in several ways, including via its membership networks, presentations to military family support groups, and communication with military installation command staff. During the 2011 camp year, priority was given to children whose parent or guardian was currently experiencing a deployment and who had not previously had the chance to attend an Operation Purple camp. Typically, participants attend camps that are in their own state, but some travel far from home.

## **Key Components of Operation Purple Camps**

The Operation Purple camp program was created to help children and adolescents (hereafter referred to as “youth”) whose parents deployed as active, National Guard, or reserve service-members with the mission of “empowering military children and their families to develop and maintain healthy connected relationships, in spite of the current military environment . . . through a variety of means, including the healing and holistic aspect of the natural world” (NMFA, undated). The camp builds on many of the principles and seeks to address many of the concerns outlined earlier in this chapter, including providing social support and tools to deal with the stress of a parent's deployment.

The curriculum for Operation Purple includes four core components, three of which focus on aspects of helping youth feel connected to the military and equipping them with the tools to address deployment-related stress (see Table 1.1). The fourth component, outdoor education, builds on another aspect of camp, which may have collateral benefits for participants' sense of calm. Outdoor education involves spending time in natural settings and learning about conservation. Each component or theme has a set of objectives, as shown in Table 1.1.

Camp leaders are encouraged to integrate these four themes into camp activities throughout the weeklong program, and Operation Purple provides ideas for activities that will achieve

**Table 1.1**  
**Operation Purple Camp Themes and Core Objectives**

Theme	Objectives
Trust: Building trust, identifying ways to communicate and discuss feelings	Campers will identify ways to communicate. Campers will learn to identify and express feelings. Campers will learn to record their feelings, thoughts, and emotions in a daily journal. Campers will use letter-writing to communicate with their parents.
Military experience: "Kids Serve, Too"	Campers will increase their knowledge of the military and the various jobs and equipment associated with military occupations. Campers will increase their knowledge of the military parent's experience while deployed.
Stewardship: Self, family, and military community	Campers will define stewardship of self, others, their community, and the environment.
Outdoor education: "Leave No Trace," outdoor education	Campers will become educated about the camp's ecology/natural setting. Campers will become more aware of opportunities to take care of their surroundings on a daily basis through the "Leave No Trace" principles.

this objective. There is no strict requirement regarding how much exposure (the relative "dose") to each of these themes each youth is expected to receive. However, there are several required activities that must be completed during each camp, and each of these activities uniquely addresses at least one of the components.

In the following sections, we review the literature pertaining to other programs that have addressed one or more of the four components of the Operation Purple curriculum and discuss evidence of the impact that these programs have on comparable outcomes. This review sheds light on how the Operation Purple program may affect similar outcomes and alleviate burdens among those who participate in the weeklong summer camp.

### **Communication About Stress**

One of the aims of Operation Purple is to teach campers how to communicate about their emotions by educating them on how to identify their feelings and express them in a journal and through letters to their parents. Other camps, particularly those that are therapeutic (such as camps to aid children who are dealing with a stressful event or illness) have used similar strategies to achieve the same goals for other populations, and there is research that documents their efforts. Given that Operation Purple intends to help youth dealing with the stress of parental deployment, this literature may be instructive. For example, Creed, Ruffin, and Ward (2001) evaluated Camp New Horizons, a therapeutic camp for children who lost a sibling to cancer. The camp provided an opportunity for children to learn how to express their grief and cope with their loss. Following camp, participants had an average score of 3 on a four-point Likert scale (4 = strongly agree) on responses to the statement "Camp helped me express my feelings" and a 3.67 for the statement "Camp helped me deal with my grief." Using qualitative data, the researchers found that parents perceived the camp as helpful, noting that children were more likely to talk about the sibling who had died. Goldman (2004) explored the experi-

ences of participants in a five-day bereavement camp for children aged 7–17 and their families and found that some of the campers were able to communicate with the other families at the camp and form relationships with those who had experienced a similar loss. Loy (2000) also found that bereavement camps helped children and families to increase family communication and share thoughts and feelings. Similarly, Operation Purple's curriculum may provide campers with the knowledge of how to understand their feelings and emotions and cope with them via communication and other skills learned at camp.

### **Talking to Military Peers**

In addition to teaching youth how to communicate their feelings, another goal of Operation Purple is to provide a place where military youth can talk with other military youth who have also experienced deployment and discuss what it means to have a family member in the military. This element of peer support is a component of many other therapeutic camp programs. For instance, Wu and colleagues (2011) conducted a program evaluation of a camp for children with cancer and their siblings with the goal of understanding the extent to which the camp was beneficial to the children who attended. Children and parents reported that the children enjoyed the camp because of the opportunities for recreation, a chance for respite from stress at home, and the experience of peer support. Roberson (2010) conducted a qualitative study and found that camps for siblings of cancer patients were useful in offering an opportunity for the sibling campers to receive and provide social support by sharing their experiences. While these studies are useful, they rely principally on self-reported satisfaction data.

Camps that target youth populations with visual or hearing impairments, physical deformities, or chronic conditions also provide opportunities for these children to socialize with other children who have had similar life experiences (Day and Kleinschmidt, 2005; Briery and Rabian, 1999; Nicholas, Williams, and MacLusky, 2009; Pulgaron et al., 2010; Hunter et al., 2006). These camps give children a reprieve from feelings of isolation that they often experience in their communities (Goodwin and Staples, 2005). Meltzer and Rourke (2005) examined social comparisons among adolescents at a summer camp for cancer patients and found that participants felt closer to their peers at camp than to their peers at home. These perceptions of similarity were associated with positive outcomes, such as greater perceived self-competence related to physical appearance, social acceptance, and global self-worth.

Michigan State University developed a program to support youth transitioning from the foster care system to college. The program consisted of mentoring and active learning sessions led by former foster care participants, role modeling, and peer support (Kirk and Day, 2011). The researchers found that, after participation in the program, the campers reported perceptions of improved life skills, self-concept, feelings of empowerment, and sense of purpose.

Like other therapeutic camps and camps for children and adolescents who have undergone the same types of experiences, Operation Purple provides military youth with the opportunity to socialize with youth who are having similar experiences. This opportunity may be especially valuable to youth from Guard and reserve families, who may have less contact with other military youth. Sharing experiences and socializing may have a positive influence on psychosocial outcomes.

### **Military Culture**

The second theme of Operation Purple involves increasing campers' knowledge of military culture and the experiences of deployment. Other camps have focused on increasing camper

knowledge and awareness, such as condition-specific camps that aim to provide information to youth about their health conditions. These camps may teach participants about how to manage their condition; for example, there are camps that address self-care strategies for asthma and how to integrate the condition into each camper's life (Nicholas, Williams, and MacLusky, 2009; Pulgaron et al., 2010). Briery and Rabian (1999) took pre- and post-camp measurements of children attending camps for spina bifida, asthma, and diabetes and found that campers had improved attitudes about their illness and decreased anxiety after completing the programs. Operation Purple gives campers a similar opportunity to obtain knowledge about military life and culture, and this increased knowledge may facilitate reductions in campers' symptoms of anxiety.

### **Sense of Service/Stewardship**

The third theme of Operation Purple is to instill a sense of service to self, family, or community, or a general commitment to stewardship. The literature on youth development programs, which focuses on civic engagement and youth leadership, may be instructive. Many researchers and practitioners argue that helping youth become leaders can be effective in improving community outcomes (Checkoway et al., 2003; Youniss, McLellan, and Yates, 1997). Further, adults who participated in civic engagement activities as young people are more likely to be involved in voting and community service behaviors (Verba, Schlozman, and Brady, 1995). However, it should be noted that most of the programs that focus on creating a sense of service tend to be longer than one week and more singly focused on the objective. Additionally, many of the programs reported only anecdotal information. There are a few published evaluations, however. For example, YouthCorps is a service work program that tries to engage youth in a sense of public service, but it tends to run at least six months and up to a year. An evaluation of this program revealed positive impacts on social responsibility among other outcomes, such as later employment (Jastrzab et al., 1996). A case study of the Lexington Youth Leadership Academy, a program that emphasizes leadership skills, peer mentoring, and community collaborations, used pilot survey data to describe improvements in youth leadership development and participation in youth-driven community change projects (Otis, 2006). A study of the Zora program, a virtual community to foster a sense of service among youth that was implemented in a summer program in Massachusetts, showed some improvement in how youth considered their involvement in civic activities after program completion (Bers and Chau, 2006).

### **Outdoor Education**

Outdoor education, or conveying information related to the natural environment and conservation, is a popular component of youth programs across the country, and Operation Purple provides campers with the opportunity to engage in such activities. Participation in outdoor education programs may affect how young people understand and interact with nature and integrate environmental protection practices into their daily lives, as well as improve self-esteem and promote the development of leadership skills.

To date, few studies have explored the impact of outdoor education programs. Those that have done so show a positive impact on attitudes and interest in the environment and nature. The American Institutes for Research (2005) evaluated three weeklong residential outdoor education programs for at-risk sixth graders in California and found that youth who participated in the outdoor school were more likely to engage in positive environmental behaviors (such as recycling or closing the refrigerator door, based on parent reporting) than those

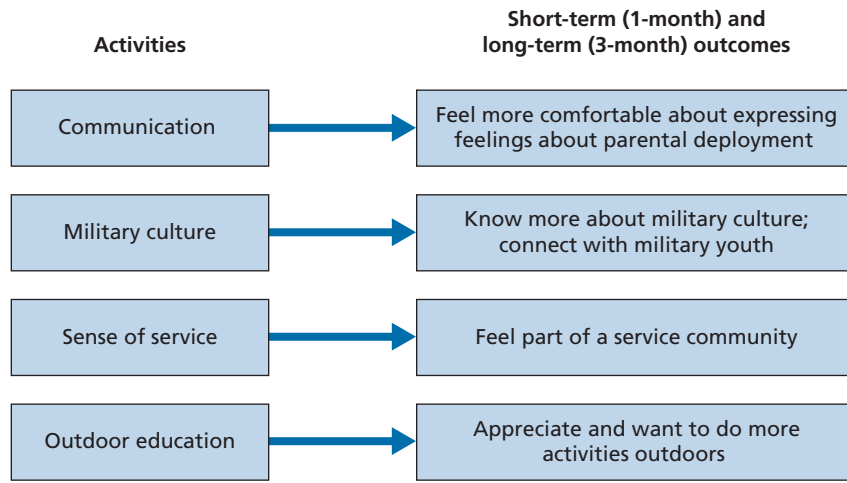
who did not participate in the program. Dresner and Gill (1994) conducted a pre-/post-test evaluation of youth attending a two-week Wolf Creek Nature Camp. They found that, upon completion of the program, the campers reported higher self-esteem, increased interest in and curiosity about nature, and improved outdoor skills. Kruse and Card (2004) found that campers who participated in a zoo education camp had increased conservation knowledge and willingness to change their behaviors (such as recycling, improving habitats, and encouraging others' awareness of wildlife protection) after participating. Stern, Powell, and Ardoin (2008) fielded a survey to participants in the Great Smoky Mountains Institute at Tremont's three- and five-day residential programs for school children. Immediately following camp sessions, the authors found significant increases in participants' feelings of connection with nature and comfort in the outdoors, environmental stewardship and attitudes about conservation, interest in learning about natural history, and awareness of species and biological diversity in the national park. Analysis of three-month follow-up surveys indicated that the significant increases in commitment to environmental stewardship and knowledge of biological diversity remained; however, interest in learning and connection to nature waned.

A few studies have also assessed the impact of outdoor education on behavioral outcomes, such as self-esteem and other related variables. Neill and Richards (1998) reviewed five meta-analyses that evaluated the impact of outdoor education programs and found that the programs had small to moderate effects on self-concept, locus of control, and teamwork. Rickinson and colleagues (2004) conducted a meta-analysis of 150 studies of outdoor learning programs (from 1993 to 2003) and concluded that outdoor adventure programs could have a positive impact on young people's attitudes, beliefs, and self-perceptions (including independence, confidence, self-esteem, locus of control, self-efficacy, personal effectiveness, and coping strategies) and interpersonal and social skills (e.g., social effectiveness, communication skills, group cohesion, teamwork). This review also indicated a link between outdoor adventure activities and environmental understanding and values; however, the evidence for this link was not strong.

## **Study Objectives**

Given the numerous potential benefits of Operation Purple camps, it is important to evaluate its actual impact on military youth and families. The following model created for this evaluation briefly summarizes the key components of Operation Purple and its intended benefits for youth (see Figure 1.1). These outcomes formed the focus of our analysis.

**Figure 1.1**  
**Logic Model for Evaluation of the Operation Purple Summer Camp Program**



RAND TR1243-1.1

## Methods

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### Objectives and Hypotheses

The study used a quasi-experimental design to assess the effects associated participation in Operation Purple® camps. To assess the potential benefits, the evaluation had two objectives: (1) to assess whether Operation Purple camps are associated with self-reported improvements in the four main camp outcome areas (communication skills, understanding of military culture, sense of service, and outdoor education) by comparing youth who attended the camps with those who applied but did not attend, and (2) to document how the 2011 curriculum was implemented by participating camps using data from the NMFA collected via camp after-action reports (AARs) and visitor logs (VLs) and to describe variations by campsite, population (e.g., age of campers), and other characteristics.

To address study objectives, we tracked changes in self-reported outcomes of interest using web-based surveys at three time points (during application, one month post-camp, and three months post-camp) as reported by the youth and a parent or primary caregiver (referred to as “parent” hereafter), with the same parent reporting at all waves. We selected these time points to be comparable with other camp and youth development studies. Most studies include a follow-up survey (typically right after camp participation and, in some cases, one month later), and a few include a three-month follow-up survey (Rickinson et al., 2004). We also documented exposure to the curriculum by campsite using AARs and VLs. The AARs documented whether the four camp components described were addressed, whether the required activities were carried out, and the types of activities that were used to reinforce the four components. The AARs also included the number of youth who were accepted to the camp in 2011, the number of applicants who canceled, and the number of applicants on the site’s waiting list. The VLs indicated fidelity of implementation for two key activities: conservation and recycling (Leave No Trace) and military education and pride via the “Wall of Honor,” a collage that is created by camp participants to illustrate military pride. The Wall of Honor, which might include a picture of the servicemember parent, is prominently displayed for all participants to see. The AARs were provided by participating camps, and the VLs were completed by trained NMFA staff members or volunteers not involved in the implementation of the curriculum.

Using the data described here, the study tested two hypotheses:

1. Youth who attend camp will report greater improvements in the following areas than those who do not attend camp: ease and skill of communicating their feelings about deployment and related experiences, understanding and appreciation of military life



and service, and knowledge and practice related to environmental issues. Parents whose children attend camp will report similar changes.

2. Youth who attend camps that cover more of the required curriculum will report greater improvements in these outcomes than those who attend camps that do not cover all of the themes.

## Survey Content

The online surveys were purposefully brief (20–25 questions each) to encourage completion and lasted no more than 15 minutes. (The full text of the surveys can be found in Appendix A.) Survey items queried respondents in the four theme areas that Operation Purple proposes to address: (1) comfort and skill in communicating feelings about deployment and related stress, (2) understanding and appreciation of military life, (3) sense of service, and (4) knowledge, attitudes, and practice related to outdoor education or environmental appreciation (see Table 2.1). To the extent possible, we used items or measures that had been used for other camp evaluations. For example, there are some established items used in other studies of outdoor education programs, as well as items related to sense of service in the youth development literature. However, given the unique content of Operation Purple, many items were created *de novo*. Few demographic or background questions (e.g., military service, component) were included in the youth survey, given that the camp application queried parents about a host of variables critical to the analysis, such as the age of the youth, deployment history, and military background. However, in the survey, we asked parents about prior program participation (before camp) and any other (non–Operation Purple) military supports or services that their child received during the study period. We linked camp application data to the RAND surveys via a common identification number, which was assigned in advance. We used the post-camp surveys to track immediate improvements in the four outcome areas. We used the three-month survey to examine whether any improvements detected after one month persisted in the longer follow-up period.

## Key Outcome Measures

Our key outcome measures aligned with the four Operation Purple camp themes. With the exception of the coping items described in the next section (which are based on an established child coping measure), we reviewed the questions with a sample of military family experts and NMFA staff to ensure that the questions had good face and content validity. In general, items incorporated a four-point scale (1 = always, 2 = sometimes, 3 = once in a while, and 4 = not at all/never). For military culture items, questions used three categories (1 = always true, 2 = sometimes true, and 3 = not true), given the phrasing of these items. Since always equals 1 in our scales, a lower mean score in our outcome tables for one group indicates healthier attitudes or more knowledge on a particular outcome item in that group than in the control, or no-camp, group (see Chapter Three).

**Table 2.1**  
**Survey Items, by Theme**

Youth Survey Item	Parent Survey Item
<b>Comfort and Skill in Communicating Feelings About Deployment-Related Stress</b>	
4. I know what to do to make myself feel better when I am stressed out about my parent's (family member's) deployment.	8. My child knows how to make him/herself feel better when he/she is stressed out about his/her parent's deployment.
14. I get nervous because I don't know about what my deployed parent is doing during deployments.	9. I know how to help my child feel better when he/she is stressed out about his/her parent's deployment.
15. I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	15. My child gets nervous because he/she doesn't know about what his/her parent is doing during deployments.
16. I can ask my parents questions about the military and the war.	16. My child doesn't feel nervous about his/her parent when he/she deploys because my child has seen the equipment that protects his/her parent.
5w. When I feel upset or stressed out about my parent being deployed, I talk to my parents about how I feel.	19. My child can ask me and his/her deployed parent questions about the military and the war.
5x. When I feel upset or stressed out about my parent being deployed, I talk to my friends (on the phone, email/text, or in person) about how I feel.	10b. When my child feels upset or stressed out about his/her parent being deployed, he/she talks to me or his/her other parent about how he/she feels.
5z. When I feel upset or stressed out about my parent being deployed, I talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel.	10c. When my child feels upset or stressed out about his/her parent being deployed, he/she can talk to friends (on the phone, email/text, or in person) about how he/she feels.
12. I feel like I am part of a community that supports me and my parents.	10e. When my child feels upset or stressed out about his/her parent being deployed, he/she can talk to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels.
<b>Military Culture and Connection to Military Peers</b>	
7. I have friends who are military kids that I can talk to about being a military kid.	13. My child feels like he/she is part of a community that cares about him/her and his/her parents.
13. I feel good talking about being a military kid with people in my school (teachers, other kids).	14. My child has friends who are military kids that he/she can talk to about being a military kid.
17. Other than my family members, I have talked with someone in the military about what their life is like.	17. My child feels good talking about being a military kid with people in his/her school (teachers, other kids).
18. Who, of the following, serves our country? "I do."	20. Other than my child's family members, he/she has talked with someone in the military about what their life is like.
<b>Sense of Service/Stewardship</b>	
19. I try to find ways to help people who need help.	12. My child tries to find ways to help people who need help.
11. I try to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	18. My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.

**Table 2.1—Continued**

Youth Survey Item	Parent Survey Item
<b>Outdoor Education</b>	
How often do you do the following at home?	How often does your child do the following at home?
21j. Recycling	22a. Recycling
21k. Visiting parks	22b. Visiting parks
21l. Turning off lights more	22c. Turning off lights more
21m. Going camping	22d. Going camping
21n. Asking parents to choose paper over plastic bags	22e. Asking his/her parents to choose paper over plastic bags
21o. Changing light bulbs [for energy efficiency]	23f. Changing light bulbs [for energy efficiency]
21p. Taking hikes	23g. Taking hikes
21q. Taking shorter showers/baths	23h. Taking shorter showers/baths
21r. Playing outside	23i. Playing outside
5b. When I feel upset or stressed out about my parent being deployed, I go outdoors for a walk or hike [to feel better].	11g. When my child is upset or stressed out about his/her parent being deployed, he/she goes outdoors for a walk or hike [to feel better].

### Comfort and Skill in Communicating Feelings

We used a series of questions to track the self-reported (and parent-reported) comfort of youth in expressing their feelings about deployment-related stress, communicating with others about those deployment-related feelings, and coping with any deployment-related stress that they may experience (Ayers and Sandler, 2000). Since Operation Purple intends to help youth find ways to manage their stress and feel more comfortable talking about their feelings related to parental deployment, these were key items to include in the surveys. Specifically, we modified items from the Children's Coping Strategies Checklist (CCSC) and the How I Coped Under Pressure Scale (HICUPS) developed by Ayers and Sandler (2000). The CCSC and HICUPS are designed to assess a child's ability to cope with stressful or painful situations. The measures include subscales that capture problem-focused coping (decisionmaking and problem-solving), emotion-focused coping (e.g., expression of feelings), distraction strategies (engaging in distracting actions), avoidance, and support-seeking coping. The CCSC and HICUPS have been used with diverse populations of children. The scales have reasonable alphas ranging from 0.50 to 0.70. Using modified items from the Ayers and Sandler (2000) subscales, we queried youth (and asked for parental perspectives) about whether they knew how to help themselves feel better if experiencing stress or anxiety about a parent's deployment. We asked parents whether their child communicated with them about their feelings regarding deployment. In addition, we relied on the coping literature to assess youth coping strategies (e.g., using avoidant or active forms of coping), which may be critical for how youth cope with deployment-related stress (Krohne, 1993; Scheier, Weintraub, and Carver, 1986; Tobin et al., 1989). After the first baseline survey, we added questions about how youth connected with military peers and their preferred mode of communication. These additional items were intended to inform future efforts that NMFA may pursue to connect youth virtually between camp experiences.

### **Understanding and Appreciation of Military Life**

Many Operation Purple camp activities emphasize connecting with other military peers, developing a better knowledge of military culture, and instilling a sense of pride in being part of a military family. For these areas, we developed several survey questions related to having a military peer to whom a respondent could turn to share feelings about being a military youth, meeting with and learning from a servicemember who was not part of the youth's family, understanding what may occur during deployment so that the youth felt less stressed, and feeling proud of talking about being a military youth in the youth's community. We also included an item about whether the youth felt that they were part of a service family, or "they served too."

### **Sense of Service/Stewardship**

For this component, we included items about general civic engagement by assessing whether youth reported helping others in need and whether they reported helping other military youth in need.

### **Outdoor Education**

This area is the fourth component of the camp curriculum. Camps varied in their relative emphasis but tended to focus on such themes as appreciation for outdoor experiences, conservation, and other aspects of environmental preservation (e.g., recycling). We built on outdoor education items that we had used in a prior longitudinal study of military youth (Chandra, Lara-Cinisomo, et al., 2011; Burns, Chandra, and Lara-Cinisomo, 2011) to develop the survey items in this outcome area; we included an additional question about comfort with outdoor activities. At wave 3, we added a few items about the importance of outdoor activities (assessing the degree to which it is important to "be prepared for outdoor activities" and "leave rocks and other objects as you found them during outdoor activities"). Since these items were included in only one survey wave, we cannot examine change over time, but we do report on those items in Chapter Three and Appendix G.

### **Scale Development**

We explored the potential scale development for items within each camp theme area. First, we assessed whether the items conceptually aligned with merit scale creation. For two of the theme areas (understanding and appreciation of military life and sense of service/stewardship), the items were conceptually discrete (e.g., getting to know military peers versus understanding military culture). Second, we examined the issues statistically via exploratory factor analysis. Three of the four scales had alphas below 0.70; for outdoor education, the alpha was 0.72. We also examined whether scales were associated with camp participation and other variables of interest and noted no statistically significant findings. For these reasons, we selected to report differences by single-question items only.

## Open-Ended Items

In the follow-up survey waves, we included a unique open-ended question for youth and parents, respectively. The one-month follow-up survey included separate questions for youth who attended camp and those who did not. The parent survey open-ended question also differed by camp attendance. To help identify camp benefits as perceived by campers and their parents, camper youth and parents were asked to provide information about the ways in which Operation Purple had helped them. To capture resources that non-campers used in the absence of Operation Purple, both parents and youth were queried about where they went for help during the summer of 2011. The questions were developed in consultation with NMFA. The first two questions listed here were developed to ensure that we fully captured the youth camp experiences and parents' perceptions of the camp. The next two questions were designed to identify services accessed by youth who had not attended the camp and their parents.

- Camper, youth: How has Operation Purple helped you as a kid?
- Camper, parent: How do you think Operation Purple helped your child?
- Non-camper, youth: Where do you turn for help when you have a concern about your parent's deployment?
- Non-camper, parent: Finally, given that your child did not attend Operation Purple, we would like to know what activities or resources you used this summer to help your child as a military kid (for example, other programs, other supports).

All parents and youth were asked the same open-ended question at the three-month follow-up survey. Again, the questions were developed by the research team and NMFA.

- All youth: Why do you think Operation Purple is important for children and families?
- All parents: How do you think a camp like Operation Purple can help children and families?

With the exception of the questions about where youth who did not attend an Operation Purple camp and their parents go for help, results from the open-ended items were used to help evaluate the impact of Operation Purple. Comparable questions regarding camp benefits were not asked of non-campers because they did not experience the intervention.

## After-Action Reports and Visitor Logs

To assess whether Operation Purple was implemented as intended, we used data collected via AARs and VLs. Prior to the study, we worked with NMFA to modify the forms used for AARs to capture the core elements, component objectives, and required activities that were incorporated into each camp's curriculum (see Table 1.1 in Chapter One). Although on-site camp observation conducted independently by the RAND team would have been the preferred mode of capturing these data, study resource constraints required that we rely on observation data collected by NMFA. We discuss these limitations in Chapters Three and Four.

AARs were completed by the camp director, and visitor observations were conducted by NMFA volunteers or employees, who then completed the VLs. The study team provided each visitor/observer with a training webinar prior to the observation visit. Camp visitors (those

completing the VL) were required to view the webinar, which explained the expectations for their visit, the role they play in visiting the camp, and an overview of the camp curriculum and activities, as well as reporting procedures.

Campsites were assigned based on proximity to the observer's residence. The visitor determined the time and day of the observation but was encouraged to conduct the visit in the middle of the week to capture a more typical day; the visits typically lasted one to seven hours. We did not assess inter-rater reliability, and there were no quality assurance measures. All observers used a standardized log, which focused on the following eight areas: (1) logistics associated with scheduling the visit, (2) condition of the campground, (3) food quality and characteristics of the staff, (4) activities observed, (5) whether the camp addressed the mandatory theme during the visit (theme was not specified), (6) whether the Wall of Honor was properly displayed, (7) whether Leave No Trace principles were implemented, and (8) the camp director's experience running the program.

Our analysis focused on whether the camp addressed the mandatory theme during the visit (theme was not specified), whether the Wall of Honor was properly displayed, and whether Leave No Trace principles were implemented as required by camp staff.

We planned to use the AAR data in our final analytic models to categorize campsites by level of exposure to the core camp themes, as indicated in our second study aim and research hypothesis. However, camp directors were not required to indicate the *degree* to which they implemented the curriculum. Instead, AARs captured whether a given activity associated with the curriculum was implemented and required some examples. Therefore, the dosage, or the extent to which those activities were carried out, was not reported with any consistency by camp directors. As a result, we relied on the information provided in the AARs and captured frequency when available simply to provide context for the survey findings. The AARs provided a useful way to learn about the range of activities carried out at the camps to address the four required themes, which will be helpful in determining ways to strengthen future implementation of the intervention.

## Covariates

Our analyses included several variables that may be related to differential camp effects. These included gender, age, military component (active, National Guard, reserve), and whether the parent was deployed while the youth was at camp (or during the same period), and the number of parental deployments prior to camp attendance (or prior to the camp period). We also included prior camp attendance and exposure to other military support programs, given that these variables may affect camp experiences and survey responses. In addition, we included all baseline survey items in our propensity score weighting (youth self-reported versions were used in analyses of youth, and parent self-reported versions were used in analyses of parents).

We also considered several camp-level variables, including sponsor type (e.g., Easter Seals, 4-H) and the relative proportion of National Guard and reserve youth in a particular camp. For the latter measure, we expected that camps with more or fewer Guard/reserve youth would emphasize military understanding activities in different ways. The sponsor type was ultimately discarded because it was not conceptually meaningful (e.g., camps that were sponsored by programs for youth with disabilities, such as Easter Seals, as opposed to general youth programs, did not necessarily implement camp themes differently or attract different campers). We also

explored the relationship between sponsor type and our outcomes of interest in bivariate analyses; no associations were statistically significant. The Guard/reserve proportion was also discarded because it was not found to explain significant variation in our outcomes (i.e., p-values were greater than 0.05 in preliminary multivariate models that examined the association of this variable with each outcome while controlling for other covariates).

## Sample Considerations

Ideally, we would *randomly* assign youth to attend camp or not attend camp to minimize bias from observed and unobserved differences in baseline characteristics between the two groups. However, the current camp selection process (i.e., prioritizing those who had an impending parental deployment and had not attended camp in prior years) did not allow for randomization; thus, we implemented a quasi-experimental design that involved two key steps. Our study needed to balance how the camp had accepted participants in prior years with the need for the most robust evaluation design possible within those constraints. First, we identified a meaningful group of youth who did not attend camp among those who applied to Operation Purple to serve as the control sample (93 percent of whom were not accepted to the camp and 7 percent of whom were accepted but did not end up attending). Second, we used propensity score weights to adjust for the differences in baseline characteristics and outcomes between the youth who attended (the intervention, or camp, group) and those who did not (the comparison, or no-camp, group), thereby minimizing bias from observed covariates in our estimates of the impact of camp on outcomes.

Due to camp participation restrictions, such as fewer available slots, fewer camps that offered the program, and less funding during 2011, Operation Purple camps accepted fewer applicants than usual. Therefore, applicants who had not attended camp before and were going to experience an upcoming parental deployment were more likely than other types of applicants to be accepted to Operation Purple camp.

While we intended to draw a random sample of youth from among those who had never attended camp before and among whom a current parental deployment was imminent (tier 1), given the available study population, we invited all youth to participate in the baseline survey, including those defined as tier 2 (i.e., those who were not first-time attendees and had an impending deployment) and tier 3 (i.e., those who did not have an impending deployment, regardless of prior camp experience). We tracked the number of those accepted and those not accepted after the baseline survey to ensure that we would get adequate no-camp representation in the analytic sample, since we knew whether the applicant had been accepted only after the baseline survey was administered. Originally, we thought that our control group would be composed of youth who were not accepted and thus did not attend, but we had a small group of campers who applied, were accepted, and ultimately did not attend ( $n = 40$ ). We opted to include this group in the no-camp group because these youth were not exposed to the potential benefits of attending camp. We carefully examined whether this group and the group not accepted differed on key demographic characteristics and survey outcome measures and found no meaningful differences. The approach we took to address imbalance in our samples is described in the next section.

## Initial Sample

The study population for this assessment consisted of all applicants to Operation Purple camps in 2011. Ultimately, 10,414 youth applied to camp, but only 6,004 provided complete application data. After removing duplicates and selecting one youth from each family, the eligible pool invited to participate in the study consisted of 3,603 applicants (aged 7–17 years). We surveyed both the parent or caregiver who submitted the application on behalf of their child and the youth applicant, and we required that the same parent respond to the follow-up surveys in waves 2 and 3. If there was more than one applicant per family, we selected one youth per family for study participation by placing the names in alphabetical order and selecting the first name on the list. Camp applicants were enrolled in the study at the time of camp application, when parents completed the online application. The final analytic sample included those who were accepted and attended camp, those who were accepted and did not attend camp, and those who were not accepted to camp. Our comparison of interest was between those who actually attended camp and those who did not (i.e., those who were either not accepted or who accepted but did not attend).

## Study Enrollment

We implemented web-based youth and parent surveys at three time points during the study (during application or before camp, one month after camp, and three months after camp) from summer 2011 to December 2011. These follow-up intervals have been used in other studies of one-week camps (Briery and Rabian, 1999; Michalski et al., 2003). We used the survey software program SurveyMonkey® to administer the surveys. NMFA could have administered the survey via a link from the initial camp application, but the preferred option was for RAND to host the survey to avoid influencing respondents. During the spring 2011 camp application period, parents who applied on their child's behalf were asked to participate in the RAND study (providing consent for themselves and their child). If they agreed to participation, they received an email invitation from the RAND study team with a set of survey questions for the purpose of the camp assessment. In addition, parents were asked to provide a secure email address for the youth respondent (either a family email address that the youth could access or a separate email address for the youth). Subsequent to camp application (within two weeks), an email was sent to the youth to complete an online survey as well.

## Survey Pilot Test and Administration Process

To pilot the survey, we employed two approaches. We asked a group of ten parents and youth to review the instrument to determine whether the questions were clear and how they were interpreted. We reviewed the pilot data for completeness, ensuring that the web mode worked appropriately. The next two surveys (one month and three months post-camp, respectively) were administered with the same email approach. Prior to the email invitation to complete the next survey, the RAND team sent a postcard to the participants to remind them that the survey was coming and to verify their email addresses. An incentive of \$10 per post-camp survey wave, per respondent, was provided to each family that participated in the study.<sup>1</sup> This incentive was used to thank families for their time and was particularly critical for applicants who were not accepted to a 2011 Operation Purple camp and may have been reluctant to

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<sup>1</sup> This meant that each family could receive a total of \$40 in gift cards.



participate in the study based on dissatisfaction about camp acceptance. NMFA purchased the incentives for the study, but the incentives were distributed by the RAND team.

The study was reviewed and approved by RAND's Human Subjects Protection Committee.

## Survey Sample

Table 2.2 summarizes the sample of youth and parents who completed the survey at each wave. At baseline, we recruited 977 parent-youth pairs (27 percent of 3,603 applicants who were initially invited). At baseline, 44 percent were accepted to an Operation Purple camp. At the study's conclusion, 270 parent-youth pairs had participated in all three survey waves (28 percent of baseline sample), but participation rates by respondent type were slightly better, with 314 youth (32 percent) and 438 parents (44 percent) participating in all three surveys.

For our analyses of the survey data, we had four analytic samples. We included all respondents who completed waves 1 and 2 ( $n = 603$ ) for our analyses of the short-term impact of camp on our four outcome domains and all respondents who completed waves 1 and 3 regardless of wave 2 completion ( $n = 597$ ) for our analyses assessing the mid- to long-term impact of the camp. At each wave, we created separate models for the youth and parent survey responses because effects may differ by respondent type and because youth-parent discordance was observed in prior Operation Purple camp studies (Chandra, Lara-Cinisomo, et al., 2010; Chandra, Lara-Cinisomo, et al., 2011). Thus, at wave 2, we had total analytic sample sizes of 387 and 560 when analyzing youth and parent outcomes, respectively; at wave 3, we had total analytic sample sizes of 491 and 542 when analyzing youth and parent outcomes, respectively.

**Table 2.2**  
**Survey Sample**

Sample Subset	Number (%)		
	Completed Baseline Survey ( $n = 977$ )	Completed Baseline and Wave 2 Surveys ( $n = 603$ )	Completed Baseline and Wave 3 Surveys ( $n = 597$ )
Youth only	—	43 (7)	55 (9)
Parents only	—	216 (36)	106 (18)
Youth and parents	977 (100)	344 (57)	436 (73)
Youth, total	977 (100)	387 (64)	491 (82)
Parents, total	977 (100)	560 (93)	542 (91)
Attended camp in 2011 (intervention group)	432 (44)	290 (52)	293 (51)

## Survey Analyses

To assess the impact of Operation Purple camps on the four main camp outcome areas (communication skills and coping strategies, understanding of military culture, sense of service, and outdoor education), we used quasi-experimental strategies to achieve balance between youth who attended an Operation Purple camp and those who were in our no-camp group on baseline survey measures of the outcome areas and demographic variables (see the section “Covariates,” earlier in this chapter). Specifically, we used propensity score weights that weighted youth from the control-group sample at baseline to look like those youth who attended an Operation Purple camp during the summer of 2011 (Rosenbaum and Rubin, 1983; Rosenbaum, 1995; Hirano, Imbens, and Ridder, 2003; Imbens, 2004). Propensity score weighting is a quasi-experimental strategy that required that we estimate “counterfactual” outcomes for youth and parents in the camp group that measure the outcomes that would have been observed had the assigned youth not gone to camp (i.e., if they had been in the no-camp group). To do this, we created propensity score weights to weight the no-camp group in each analytic sample, matching this pool to the camp group with respect to the distributions on baseline demographic measures and baseline survey measures of the outcomes. Thus, we “upweighted” youth or parents in the no-camp group who were similar to youth or parents in the camp group with respect to these baseline measures and “downweighted” those who were not. Then, we compared the (unweighted) outcomes of youth who attended an Operation Purple camp with the propensity score–weighted outcomes of youth in the no-camp group. Four different sets of propensity score weights were used for the analyses of the four analytic samples (wave 2 youth, wave 2 parents, wave 3 youth, and wave 3 parents). For analyses involving wave 2 and wave 3 youth, the propensity score model controlled for baseline demographics and youth responses to baseline measures of the outcome variables. For analyses involving wave 2 and wave 3 parents, the propensity score model controlled for baseline demographics and parent responses to baseline measures of the outcome variables.

Generalized boosted models (GBMs) were used to estimate the propensity score weights for the control-group (no-camp) youth. GBMs provide a nonparametric, flexible, and robust estimation technique for obtaining propensity score weights. The GBMs were controlled for demographic characteristics, including applicant age, applicant gender, deployed parent’s service and component (active versus National Guard or reserve), deployment status at the time of the camp, number of deployments, and baseline items for the outcomes of interest (both youth responses to the item and the parent’s responses). While we acknowledge that we may have missed some unobserved variables that could explain differences between the groups (see Chapter Four), on the basis of prior military family and camp studies, we are confident that we captured most of the important factors that may affect our outcomes of interest. The military (e.g., component) and deployment history (e.g., current deployment) variables have been identified as critical to military youth experiences of parental deployment (Chandra, Lara-Cinisomo, et al., 2011; Lester, Mogil, et al., 2011; Flake et al., 2009), and these were included in our propensity score weighting. We also included prior Operation Purple camp experience and current youth program exposure, which also may have confounded or affected our findings. The main variable that was not included because of data availability was a more complete deployment history (e.g., cumulative months of deployment), which we know is often related to youth stress levels. However, this may be only distally related to camp experience.

GBM were estimated using the *twang* package in R (Ridgeway et al., 2012). We assessed the performance of the propensity score weights by computing pre- and post-weighting absolute standardized mean differences (ASMDs) between the youth who attended Operation Purple camps and the control group for each of the baseline variables used to create the weights (see Appendix B).

The ASMD is estimated as follows:

$$\frac{|\hat{\mu}_t - \hat{\mu}_c|}{\hat{\sigma}_t},$$

where  $j = t$  and  $c$ , respectively;  $\hat{\mu}_j$  denotes the estimated mean value for the intervention (Operation Purple camp) and comparison (no-camp) groups; and  $\hat{\sigma}_t$  denotes the estimated standard deviation (SD) for the variable in question and is estimated using the observed variance in the camp group. Values of 0 for an ASMD represent no significant difference in means, while values of  $\pm 1$  represent one standard deviation difference between the two groups. Since standardized differences of 0.20 are generally considered to be small effect size differences, we denote group differences to be notable (i.e., imbalanced) when the ASMD is greater than 0.20 (Cohen, 1992). Any variables with an ASMD greater than 0.20 after weighting were controlled for in sensitivity analyses (described later).

Using the estimated propensity score weights, we evaluated the impact of Operation Purple camps on outcomes at waves 2 and 3 via two primary sets of analyses for each of the four analytic samples (wave 2 youth, wave 2 parents, wave 3 youth, and wave 3 parents). First, we computed mean differences between the camp and the weighted no-camp groups for both youth and parent survey outcomes measured at a given wave and used weighted t-test statistics to assess whether the difference in means for a given outcome measure was statistically significant. Next, we created binary indicators measuring whether a particular survey item was endorsed at a higher level of confidence or more frequently than at baseline for each outcome and computed weighted mean differences and t-test statistics to determine whether those who attended camp experienced greater improvement over time than youth in the no-camp group. We used binary indicators to measure improvement rather than ordinal change scores because these variables generated data of practical significance. In short, the analysis of dichotomized outcomes (those that improved versus those that did not) allowed us to look at change from not feeling good about a particular dimension to feeling greater comfort on that dimension after camp.

Given the large number of tests in each outcome domain, we used a conservative Bonferroni adjustment for our p-values within a given family of outcomes. Specifically, for each analytic sample, p-values less than or equal to  $0.05/k$  were considered to be statistically significant, where  $k$  denoted the number of survey items being considered in a given outcome domain. In a few instances, we discuss results that suggest a “trend” toward camp having an impact on a particular outcome, where “trend” means that the difference between the camp and no-camp groups had a p-value of less than 0.05 but greater than the Bonferroni-corrected cutoff for determining statistical significance. We do this only in cases in which there appears to be consistent evidence of an effect across multiple analytic samples and analyses and thereby try to avoid being overly conservative in our multiple testing corrections.

In cases in which there were imbalances between the camp and no-camp groups, we ran sensitivity analyses that adjusted for the imbalanced baseline measures in addition to the propensity score weights to assess whether our estimated treatment effect (or difference in weighted means) was sensitive to the inclusion of the imbalanced variables.

In addition to the main analyses described here, we explored whether camp participation had a notable differential impact on youth who were first-time camp attendees. The analysis plan for this subgroup proceeded in the same fashion as described earlier for the entire sample (see Appendix B for balance information on this sample). Given our initial interest in sampling youth with no prior camp experience only, we examined the smaller subset of camp applicants in the camp and no-camp groups who had never attended camp to determine whether Operation Purple camps had a greater impact on this particular subsample of youth. While we adjusted for prior camp attendance in all models for the entire sample, this subsetted analysis allowed us to examine the effect of Operation Purple on a group of youth who were truly “non-exposed” at baseline. Moreover, the control group in this case had never been to camp, so it represents a purer “non-exposed” group for the purpose of assessing the impact of Operation Purple. In particular, this no-camp group had never been exposed to the potential benefits of camp and would be subject to minimal “contamination” from prior camp experiences when we examined how their outcomes compared with those of youth in the camp group. In short, this was our best attempt to develop a tier 1 comparison (see the section “Sample Considerations,” earlier in this chapter).

## Follow-Up Rates and Nonresponse

We assessed instances of nonresponse (via attrition from the study) by carefully comparing the group of responders at wave 2 and wave 3 (separately) with the original baseline sample. We conducted these analyses separately for youth and parent survey responders at each wave and by treatment group. As with the propensity score weights, we assessed differences between responders and nonresponders by computing the ASMD between the two groups for all baseline demographic and outcome survey measures. ASMDs greater than 0.20 indicated meaningful differences between responders and nonresponders in this analysis (Cohen, 1992). We note that no variables had an ASMD greater than 0.20 in this analysis (see Appendix C), and, thus, responders at wave 2 and wave 3 for both the youth and parent surveys and for both treatment conditions appear representative of the baseline sample. Additional analyses examined whether there were any meaningful differences between respondents with wave 2 and wave 3 data (see Appendix C). Our findings indicated that these two samples were generally highly similar across baseline demographic and outcome survey measures, as well as wave 2 outcome survey measures. One exception should be noted: Survey respondents in later waves tended to be less likely to have prior Operation Purple camp experience than the baseline sample.

It is important to note that follow-up rates were higher for those who attended camp than for those who did not. Among those attending camp, about 45 percent of youth and 68 percent of parents in the baseline sample responded to the wave 2 survey, and 56 percent of youth and 64 percent of parents in the baseline sample responded to the wave 3 survey. Among those who did not attend camp, these numbers were 35 percent and 49 percent, respectively, at wave 2 and 46 percent and 49 percent, respectively, at wave 3. We note that, in both the camp and no-camp groups, the response rates are somewhat lower than in other studies of similar popu-

lations (Chandra, Lara-Cinisomo, et al., 2011; Lester, Mogil, et al., 2011); however, this was a web survey, a method that generally has a lower response rate than other survey dissemination methods (median rate of 34 percent) (Bälter et al., 2005; Shih and Fan, 2008). Given that there do not appear to be meaningful differences between responders and nonresponders within each treatment condition (see Appendix C), the differential follow-up rates for the treatment conditions is likely to be a concern only if the outcomes reported at the follow-up waves differed significantly between responders and nonresponders.

## Open-Ended Item Analyses

While most of the survey questions were multiple-choice and thus amenable to quantitative analysis, each instrument had one open-ended question (as discussed earlier). We reviewed the open-ended responses, catalogued all responses, and then coded the responses using a matrix approach recommended by Miles and Huberman (1994). First, we randomly selected ten cases for each open-ended question. Then, we put the open-ended responses into a matrix, which allowed the study's two principal investigators to compare the responses of individual respondents. While comparing responses within questions and by respondent type (e.g., youth who attended camp), they created codes that captured the key themes in each response. Next, the two investigators compared and contrasted their respective codes and discussed any discrepancies. A final set of codes was established for each open-ended question and used for the remaining cases.

Among the 293 parents and youth who completed the one-month follow-up survey, 270 parents and 175 youth responded to the open-ended question about the benefits of camp attendance. There were significant differences between youth who responded to the open-ended question about how camp helped them and those who did not respond to the question. Appendix B shows that youth who responded to the open-ended question tended to respond to items with more confidence or comfort in a given domain than those who did not respond; this pattern was not observed among parents. Given these key differences, the results reported in Chapter Three should be interpreted with caution.

## After-Action Report and Visitor Log Analyses

According to information provided in the AARs, most camps reported successful implementation of the curriculum. In fact, more than 80 percent of the camps reported addressing all four camp themes. In contrast to the information gathered from the AARs, which were compiled by camp directors, results from the analysis using the VLs indicated that *fewer* than 80 percent of camps implemented the observed activities (military culture and conservation) as required. The following results are based on 28 camps observed using the VLs; four camps were not observed due to the absence of an appropriate site visitor/observer. The results indicate that 15 of 28 camps (54 percent) were deemed "high-adherence" sites, meaning that those sites were observed implementing 75 percent or more of the curriculum components and reported implementing the same proportion of the required activities. Thus, these results suggest that 15 sites were observed as successfully and appropriately implementing the four observed activities (see Chapter One for a more detailed discussion of camp activities). Five of the 28 camps

were classified as medium-adherence sites (i.e., observed and reported implementing 50 percent to 75 percent of the required curriculum components), and eight were defined as low-adherence camps, defined as sites that were observed and reported implementing fewer than half of the required components. These results suggest that there is overlap between high-adherence sites (as deemed by the outside observer) and those whose camp director reported implementing the required activities across all domains. In contrast, there was low congruence between medium- and low-adherence sites and those in which camp directors reported carrying out the required activities across all four themes.

Given this discordance between AAR and VL data and consequent concerns about data validity, we ultimately decided not to construct a fidelity measure to use in our outcome models. Thus, we were unable to assess our second study hypothesis that youth and parents at camps that implemented the curriculum with higher fidelity would have seen better outcomes. Nonetheless, we used the data on camp descriptions to contextualize our survey results and offer explanations for trends or key findings (see Chapter Four). The analytic approach is described here.

Each camp provided an AAR as a Microsoft® Word document. We transferred this information to a data file to allow comparisons across camps. Specifically, we used dichotomous variables (0 = no; 1 = yes) to document whether a camp reported addressing the four components and whether the required activity was carried out. We used qualitative data analysis methods to analyze the textual descriptions about the specific activities that the camps used to reinforce the four components. A matrix was then created to document the activities reported by participating camps. Matrices are useful when comparing data or, as in this study, notes about specific activities (Miles and Huberman, 1994). As such, when making comparisons, we paid special attention to the type of activity reported for a given component and, when the information was available, the frequency of that activity.

We used the information collected from the VLS to determine whether camps implemented required activities in two of four required themes: military culture and outdoor education. Communication and sense of service/stewardship were not formally assessed using the VL data. As noted earlier, the lack of consistency in VL data across the four components (e.g., collected at different times of day or week) rendered the data less useful for the survey analytic models, but we did use the VL data to offer additional context to the AAR information. The following four activities were the focus of the camp observation to determine whether camps implemented the required curriculum in the two theme areas: (1) whether the camp addressed the mandatory theme during the visit (theme was not specified), (2) whether the Wall of Honor was properly displayed, (3) whether Leave No Trace principles were implemented (such as conservation), and (4) whether the camp engaged in recycling practices (e.g., reusing materials). To analyze the data extracted from the VLS, we created a spreadsheet to track whether the observer noted that the curriculum components were implemented as required and whether he or she observed the required practices, such as promoting recycling among campers, with three options: “implemented as required,” “observed, but adherence was low,” and “not observed during visit.” To capture the range of implementation across camps, we created three composite categories of program adherence: “low adherence” identified camps that did not implement the majority of the components or did so at a low level, “medium adherence” identified camps that implemented three of four required activities (including recycling) during camp visit, and “high adherence” identified camps that were observed fully implementing all required activities across the three components. Finally, camps with missing information or logs were simply labeled “missing.”



## Results

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This chapter summarizes key findings from our analyses of youth and parent survey data, as well as the data from the camp AARs and VLs. As shown in Figure 1.1 in Chapter One, our study focused on four outcome areas of interest, based on the Operation Purple® camp themes: communication about feelings, understanding and connection with military culture, sense of service/stewardship, and outdoor education. We hypothesized that those who attended camp would report greater improvement and comfort in expressing feelings and would experience less stress about deployment, a greater understanding of military culture and connection to a supportive community, a greater sense of service, and greater interest and appreciation for outdoor activities than those who did not attend camp. In the sections that follow, we describe sample characteristics and the camp activities. Then, we present findings for each of these outcome areas, with results from the youth and parent surveys and results from the open-ended questions administered through the surveys. We conclude the discussion with results from the analyses based on the camp AARs and VLs. At the end of the chapter, we summarize additional data about camp benefits, which are not specific to each of the four outcome areas but were identified by parents and youth as other benefits of camp participation (e.g., interpersonal growth).

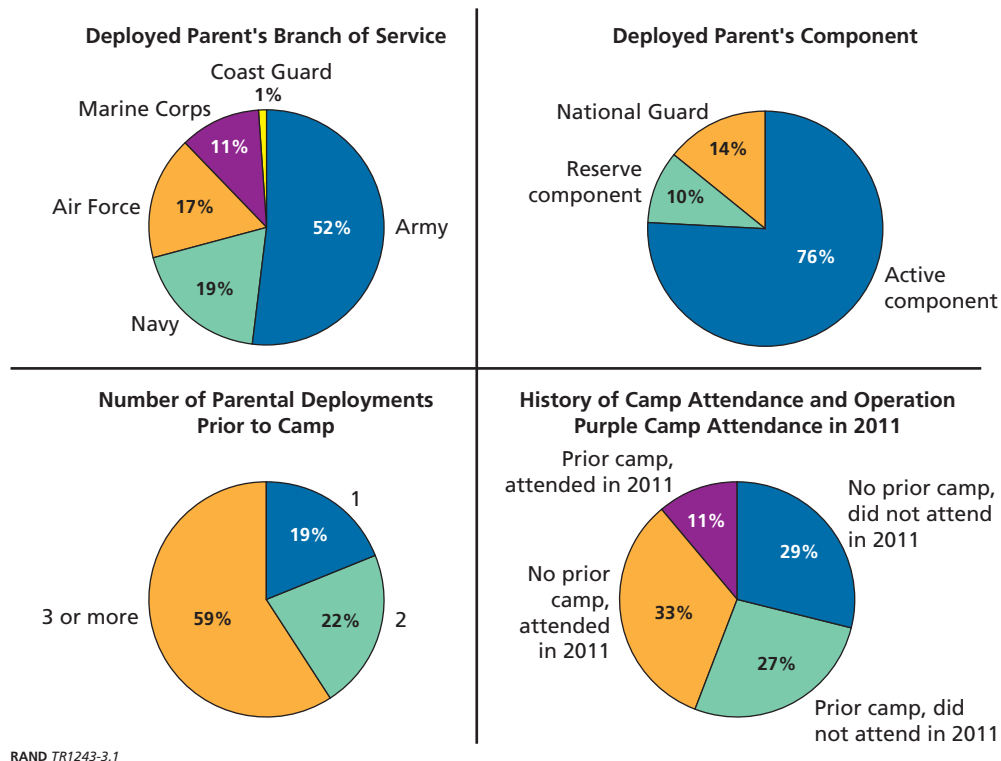
### Sample Demographics

Figure 3.1 presents the demographic characteristics of our baseline sample. As shown in the figure, 52 percent of the sample came from families with a parent in the Army, 19 percent were from the Navy, 17 percent were from the Air Force, and 11 percent were from the Marine Corps. This is fairly consistent with overall military service distribution among families with children. Approximately three-quarters (76 percent) of the sample came from the active component, with the rest from the reserve component (14 percent National Guard and 10 percent reserve). Fifty percent of the youth sample was female, with an average age of 11.0 years ( $SD = 2.2$ ). About 60 percent of the sample had experienced three or more parental deployments. For the purpose of our evaluation, 44 percent attended an Operation Purple camp in 2011 (and served as our camp group); and the remaining portion of the sample made up the no-camp group. We accounted for camp attendance prior to 2011 in all of our analyses, and, of the total sample, 39 percent had attended an Operation Purple camp before 2011. Baseline characteristics of our four analytic samples were similar and can be found in Appendix C.

Our sample's characteristics were not significantly different from those of the overall camp applicant pool (as denoted by p-values above 0.05). The average age of the campers in the



**Figure 3.1**  
**Characteristics of Analytic Sample**



applicant pool was 11.0 ( $t$ -statistic = 0.14,  $p$ -value = 0.9). Fifty-one percent of the applicant pool was female ( $t$  = 0.56,  $p$  = 0.6). There was no significant difference in the percentage of campers with a parent in the reserve and National Guard ( $t$  = 1.6,  $p$  = 0.11). The average numbers of past parental deployments in the analytic sample and the applicant pool were not statistically significantly different, either ( $t$  = 0.92,  $p$  = 0.35).

## Survey Results

As discussed earlier, we organized our analytic plan around the four outcome areas, which aligned with the camp themes. In this section, we begin by briefly describing the differences between the camp and no-camp groups before and after propensity score weighting. Then, we describe key findings in these four areas, with attention to changes that were reported from baseline to wave 2 and from baseline to wave 3. The wave 2 survey was administered one month post-camp and hence provides information on the more immediate impacts of camp participation, while the wave 3 survey data provide an indication of long-term or sustained impact. We present both sets of findings because results varied, with most findings observed at the first post-camp assessment not persisting at the time of the later follow-up survey.

In each section, we first offer results from the comparison of propensity score-weighted mean outcomes. Then, we discuss the dichotomized outcomes to show the percentage of youth (according to the youth or parent's survey) who appeared to improve on a given item (i.e., the percentage who endorsed a survey item at a higher level of confidence or more frequently than

at baseline). Finally, we report on findings from our analysis of the subsample of camp applicants who had never attended camp. Although we accounted for prior camp attendance in all models, we wanted to explore this group further as the control group representing a truly non-exposed group (see Chapter Two). The complete tables with absolute standardized means and p-values are provided in Appendix D (for the communication outcome), Appendix E (military culture), Appendix F (sense of service), and Appendix G (outdoor education). For the dichotomous outcomes, the means represent the percentage of responses that moved toward “always.” All analyses are adjusted for the covariates (factors that can affect the outcomes, such as camper age or gender) described in Chapter Two.

After presenting our findings by respondent type, we offer an explanation and context using information from the AARs and the open-ended survey responses from the first follow-up survey wave (wave 2).

### **Comparison of Groups**

As described in Chapter Two, we constructed propensity score weights to balance the camp and no-camp groups on demographic and baseline outcome variables. As shown in the tables in Appendix B, before we weighted our no-camp control group, the baseline sample of youth who attended camp were meaningfully different from those in the no-camp group in only a handful of baseline characteristics. Among the camp group, there was a higher percentage of Air Force and a lower percentage of Navy families when compared to the no-camp group; there was also (as expected) a greater percentage of youth experiencing a current parental deployment, as well as a greater percentage of youth with no prior camp experience. Tables 3.1 and 3.2 present propensity score–weighted means for the baseline demographic characteristics of the camp and no-camp groups at each wave for youth and parent survey respondents. After weighting, there were no significant differences on the baseline characteristics among three of our analytic samples (wave 2 parents, wave 3 youth, and wave 3 parents). There was a slight imbalance in the wave 2 youth analytic sample after weighting: More respondents in the camp group than in the no-camp group had a parent in the Navy. Sensitivity analyses adjusting for these variables did not show different inferences for the wave 2 youth analytic sample; thus, we report simple bivariate comparisons here.

As shown, there were no significant demographic differences at each wave between those who attended camp and those who did not, with the exception of a slightly higher percentage of youth in the no-camp group being from Navy families in the wave 2 youth analytic sample (13 percent versus 7 percent). There were also no statistically significant differences in the demographic characteristics of the camp and no-camp groups between the baseline and follow-up samples. For more detailed information, see Appendix C.

There were no statistically significant differences in the demographic characteristics of the parents whose children attended camp and those whose children did not. There were also no significant differences between the baseline and the follow-up waves.

### **Comfort and Skill in Communicating Feelings About Deployment-Related Stress**

One of the key target outcomes of Operation Purple is that the camps will offer a safe and nurturing space for youth to discuss their feelings about parental deployment and military life and

**Table 3.1**  
**Comparison of Demographic Characteristics Among Youth Survey Respondents (weighted means)**

Variable	Baseline Youth		Wave 2 Youth		Wave 3 Youth	
	Camp	No Camp	Camp	No Camp	Camp	No Camp
Prior Operation Purple camp attendance	0.24	0.29	0.22	0.30	0.25	0.32
Other camp experience	0.76	0.76	0.74	0.72	0.74	0.73
Applicant age (years)	10.9	10.8	10.8	10.8	10.8	10.9
Male	0.48	0.50	0.45	0.43	0.46	0.44
Air Force	0.20	0.18	0.24	0.16	0.19	0.18
Army	0.54	0.54	0.49	0.51	0.52	0.53
Coast Guard	0.01	0.01	0.02	0.02	0.02	0.01
Navy	0.07	0.10	0.07 <sup>a</sup>	0.13 <sup>a</sup>	0.08	0.11
Marine Corps	0.18	0.18	0.19	0.18	0.20	0.17
Active component	0.75	0.75	0.73	0.74	0.70	0.73
National Guard	0.15	0.15	0.14	0.14	0.17	0.15
Reserve component	0.10	0.11	0.12	0.12	0.12	0.12
Parent was deployed while youth was at camp (or during the same period)	0.46	0.44	0.48	0.48	0.47	0.43
Number of prior deployments	3.3	3.1	3.2	3.0	3.1	3.0

NOTE: In this table, weighted means can be interpreted as percentages for prior camp, other camp experience, service, component, and whether the parent was deployed while the youth was at camp or during the same period (and thus can be multiplied by 100). Age and number of deployments are means.

<sup>a</sup> Denotes variables for which the ASMD comparing individuals in the camp and no-camp groups in a given wave are greater than 0.20 (i.e., there is an imbalance between the camp and no-camp group).

will provide youth with tools to explore those feelings thoughtfully, through journal writing or other expressive modes. The survey asked a series of questions of both youth and parents about whether youth were able to express these concerns, how they were able to voice their perspectives, and whether that resulted in feeling less anxious or nervous about parental deployment, specifically. Table 3.3 presents the results from the comparison of weighted mean outcomes at waves 2 and 3 among the youth respondents in the camp and no-camp groups. Table 3.4 shows comparable data for the parent surveys. Recall that lower means indicate higher confidence or knowledge about a given item.

### Youth Perspectives

There were no statistically significant differences in communication comfort among youth who attended camp in 2011 and those who did not. Mean outcomes between the two groups were very similar (see Table 3.3). For example, at wave 2, youth in the camp group had a propensity score–weighted mean of 1.8 for “knowing how to make themselves feel better,” and those in the no-camp group had a value of 1.9 ( $p = 0.4$ ).

**Table 3.2**  
**Comparison of Demographic Characteristics Among Parent Survey Respondents (weighted means)**

Variable	Baseline Parents		Wave 2 Parents		Wave 3 Parents	
	Camp	No Camp	Camp	No Camp	Camp	No Camp
Prior Operation Purple camp attendance	0.24	0.30	0.24	0.31	0.25	0.31
Other camp experience	0.76	0.76	0.72	0.72	0.75	0.75
Applicant age (years)	10.9	10.8	10.8	10.8	11.0	10.9
Male (youth)	0.48	0.50	0.45	0.48	0.47	0.44
Air Force	0.20	0.17	0.20	0.17	0.19	0.18
Army	0.54	0.53	0.52	0.53	0.52	0.53
Coast Guard	0.01	0.01	0.02	0.01	0.01	0.01
Navy	0.07	0.11	0.07	0.11	0.08	0.12
Marine Corps	0.18	0.19	0.19	0.19	0.20	0.17
Active component	0.75	0.76	0.77	0.76	0.74	0.78
National Guard	0.15	0.14	0.14	0.13	0.15	0.11
Reserve component	0.10	0.10	0.09	0.11	0.11	0.10
Parent was deployed while youth was at camp (or during the same period)	0.46	0.40	0.45	0.39	0.48	0.43
Number of prior deployments	3.3	3.1	3.3	3.3	3.4	3.3

NOTE: In this table, weighted means can be interpreted as percentages for prior camp, other camp experience, service, component, and whether the parent was deployed while the youth was at camp or during the same period (and thus can be multiplied by 100). Age and number of deployments are means.

In exploring whether youth “got better” or were more likely to improve from the baseline to the follow-up survey, there were again no significant differences between the two groups (see Appendix D). Approximately 38 percent of camp attendees (versus 34 percent of those who did not attend camp,  $p = 0.4$ ) improved with respect to knowing how to make themselves feel better when stressed; about 33 percent improved from always feeling nervous to only sometimes or never feeling nervous about parental deployment (versus 32 percent of the control group,  $p = 0.8$ ); and 34 percent of camp attendees reported doing more journal writing to note their feelings (versus 35 percent of the control group,  $p = 0.8$ ). Results from the stratified analyses of youth who had never attended camp were consistent with the findings for the entire sample, with no statistically significant differences found between the camp and no-camp groups on the youth survey responses at wave 2 or wave 3.

### Parent Perspectives

While there were no distinctions between the camp and no-camp groups in *youth* reports about communication, parents shared a slightly different story (see Table 3.4). In the comparison of weighted means (i.e., exploring any difference in mean scores), more parents of youth who attended camp in 2011 reported that their child knew how to make him- or herself feel better when feeling stressed or anxious about parental deployment at both waves 2 and 3 (at

**Table 3.3**  
**Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Comfort and Skill in Communicating Feelings About Deployment-Related Stress, Youth Survey**

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
I know what to do to make myself feel better when I am nervous or stressed out about my parent's (family member's) deployment.	1.8	1.9	1.7 <sup>a</sup>	1.9
I get nervous because I don't know about what my deployed parent is doing during deployments.	2.1	2.0	2.1	2.0
I don't feel nervous about my parents when he/she deploys because I have seen the equipment that protects him/her.	2.0	2.1	1.9	2.1
I can ask my parents questions about the military and the war.	1.2	1.3	1.3	1.3
When I feel upset or stressed out about my parent being deployed, I talk to my parents about how I feel.	2.8	2.8	2.0	2.2
When I feel upset or stressed out about my parent being deployed, I talk to my friends (on the phone, email/text, or in person) about how I feel.	2.8	2.7	2.7	2.7
When I feel upset or stressed out about my parent being deployed, I talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel.	2.3	2.2	2.8	2.7

NOTE: Lower mean equals better score.

<sup>a</sup> Denotes relationships for which the p-value was less than 0.05 but greater than the Bonferroni-adjusted cutoff for determining statistical significance.

wave 2, camp mean = 1.9 and no-camp mean = 2.1, with  $p = 0.003$ ; at wave 3, camp mean = 1.8 and no-camp mean = 2.0, with  $p = 0.0008$ ). Additionally, more parents of youth who attended camp felt that they could help their child with these feelings after camp at both the follow-up times (at wave 2, camp mean = 1.6 and no-camp mean = 1.8, with  $p = 0.01$ ; at wave 3, camp mean = 1.6 and no-camp mean = 1.8, with  $p = 0.03$ ). There was also a trend among parents in the camp group at wave 2 and wave 3 toward feeling that their child could talk to the parent about feeling stressed or anxious about deployment (at wave 2, camp mean = 2.1 and no-camp mean = 2.2, with  $p = 0.01$ ; at wave 3, camp mean = 2.0 and no-camp mean = 2.2, with  $p = 0.03$ ). Results from the stratified analyses of youth who never went to camp were consistent with the findings for the entire sample, with greater improvement being reported among camp participants than in the no-camp group at both waves on the youth's ability to make him- or herself feel better and the parent being better able to help him or her.

When examining improvement on the dichotomized outcomes (i.e., those that improved versus those that did not), these findings were similar among parent responders (see Figure 3.2 for findings at wave 2). At wave 2, parents of youth who attended camp in 2011 reported significantly more improvement in the youth's ability to make him- or herself feel better at the first follow-up assessment (38 percent camp versus 25 percent in the no-camp group,  $p = 0.003$ ) and a greater sense of efficacy in helping their child feel better (28 percent camp versus 15 percent in the no-camp group,  $p < 0.001$ ). Additionally, at wave 2, there was a trend toward camp par-

**Table 3.4**  
**Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Communicating About Deployment-Related Stress, Parent Survey**

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.9 <sup>a</sup>	2.1	1.8 <sup>a</sup>	2.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.6 <sup>a</sup>	1.9	1.6 <sup>a</sup>	1.8
My child gets nervous because he/she doesn't know about what his/her parent is doing during deployments.	2.3	2.2	2.4	2.3
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.2	2.3	2.1 <sup>b</sup>	2.2
My child can ask me and his/her deployed parent questions about the military and the war.	1.1	1.1	1.1	1.1
When my child feels upset or stressed out about his/her parent being deployed, he/she talks to me or his/her other parent about how he/she feels.	2.1 <sup>b</sup>	2.2	2.1 <sup>b</sup>	2.2
When my child feels upset or stressed out about his/her parent being deployed, he/she talks to friends (on the phone, email/text, or in person) about how he/she feels.	2.7	2.8	2.7	2.6

NOTE: Lower mean equals better score, with the exception of "My child gets nervous because he/she doesn't know about what his/her parent is doing during deployments."

<sup>a</sup> Denotes relationships that are statistically significant after adjusting for multiple testing.

<sup>b</sup> Denotes relationships for which the p-value was less than 0.05 but greater than the Bonferroni-adjusted cutoff for determining statistical significance.

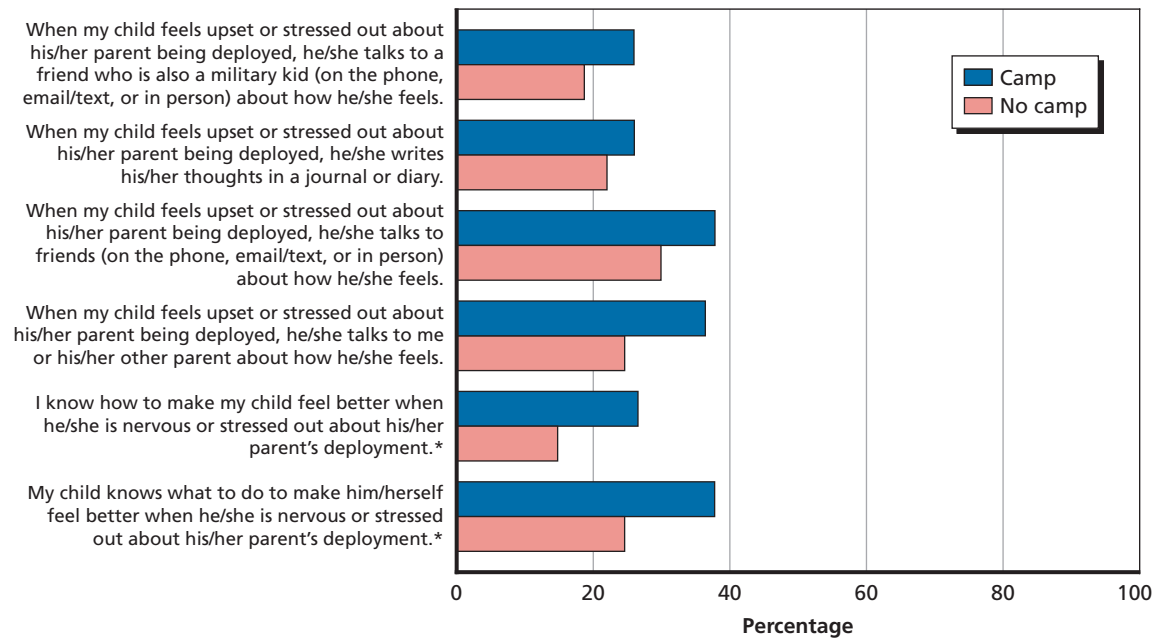
ents reporting more interactions with the youth about how he or she was feeling (37 percent camp versus 25 percent in the no-camp group,  $p = 0.01$ ). Results from the stratified analyses of youth who never went to camp before 2011 were consistent with the findings for the entire sample, with greater improvement being reported by parents on the youth's ability to make him- or herself feel better and the parent being better able to help their child at wave 2 only.

### Open-Ended Question Results

The following results are based on qualitative data collected from the camp group (parents and youth). One month following camp attendance, parents were asked how Operation Purple had helped their child. Results from the analysis indicated that 31 of the 270 parents (11 percent) who responded to this question indicated that the Operation Purple camp had helped their child develop communication skills. Specifically, parents reported that their child was more willing and able to describe his or her feelings about being a military youth and about parental deployments. To illustrate, we provide a quote from a parent:

It helped her open up and talk more about her feelings about her dad, the military, and how it makes her feel. While she has grown up mostly in military towns and kids talk some about a parent being deployed, they don't normally fully express how hard it is on them,

**Figure 3.2**  
**Parent-Reported Youth Improvement in Expressing Feelings About Deployment-Related Stress**



\*Denotes relationships that are statistically significant after adjusting for multiple testing,  $p < 0.01$ .

NOTE: Percentages represent improvement from baseline to wave 2.

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and while at Operation Purple during their talk sessions she got to see and hear that a lot more kids than she thought shared the same fears, anger, and other thoughts as she does/has.

A small proportion of youth reported that they gained communication skills as a result of attending an Operation Purple camp. Fourteen of the 175 youth (8 percent) who responded to the open-ended question indicated that they were better able to discuss their feelings about being a military youth and experiencing deployments. According to one youth,

Operation purple helped me as a kid because we talked to other military kids, we talked about ways to stay connected to are (sic) parents, and ways to cope with them being gone. Here are the reasons: First it helped to talk to other kids about my problems and they understand what I'm going through. It helped to know that someone else is going through it too. They know how it feels and we can talk about it.

### Curriculum Implementation of Communication Components

Results from the analyses of the AARs indicate that 88 percent of camps reported carrying out an activity related to the expression of feelings, and 87 percent said they also carried out activities that promoted the written expression of feelings, such as keeping a journal. While all camps reported engaging youth in activities designed to promote the communication of feelings that included verbal and nonverbal practices, only nine camps reported daily implementation of communication practices, with most reporting this occurring during "Rack Ops," also

known as bedtime. Camps used creative activities to promote communication and trust among campers, such as games and discussion groups. For example, one camp reported seating campers in small groups at mealtimes as a way to encourage communication. The use of journals was an explicit activity required of all camps, and 29 camps reported using journals on a regular basis to promote communication and the expression of feelings. Sixteen of the 29 camps reported scheduling a daily time for journal writing. An additional two camps reported some challenges with journal writing. One reported that it was not successful in the implementation of this activity, and another reported that this activity was especially challenging for older boys. No other barrier to implementation of this theme was reported.

## **Military Culture and Connection to Military Peers**

Another outcome area of Operation Purple is educating youth about military culture and fostering a sense of community in which military peers can connect with each other. Table 3.5 shows the results from the comparison of weighted mean outcomes at waves 2 and 3 among the youth respondents in the camp and no-camp groups. Table 3.6 shows comparable data from the parent survey. Again, lower means indicate higher confidence or knowledge about a given item.

### **Youth Perspectives**

Generally, there were no significant differences between the camp and no-camp groups (see Table 3.5 and Figure 3.3) on survey items regarding military culture and connection to military peers, with one exception. (See Appendix E for a complete account of the results.) In both the comparison of weighted means and binary analyses, camp attendees reported having spoken with at least one servicemember outside their family at higher rates than youth in the control group at wave 2 (comparison of means: 1.8 for the camp group versus 2.1 for the no-camp group,  $p = < 0.01$ ; binary analyses: 36 percent for the camp group versus 21 percent for the no-camp group,  $p = 0.003$ ). This finding did not persist at the three-month follow-up assessment of youth for either set of analyses (comparison of means: 1.9 for the camp group versus 2.0 for the no-camp group,  $p = 0.15$ ; binary analyses: 36 percent for the camp group versus 30 percent for the no-camp group,  $p = 0.24$ ). Our analysis of the subset of campers who had never attended camp before produced similar findings.

At wave 2, 35 percent of youth in the camp group and 18 percent of youth in the no-camp group reported improvements in their level of comfort in speaking with military servicemembers outside their family ( $p = < 0.01$ ). This finding did not persist at wave 3.

On all other survey measures in this outcome domain, there were no significant differences between the camp and no-camp groups. For example, at the final survey wave, the rates of improvement on having military peers with whom to connect (24 percent of camp youth said that they now had military friends versus 27 percent of no-camp youth,  $p = 0.51$ ) and feeling part of a community (24 percent of camp youth reported more connectedness versus 28 percent of no-camp youth,  $p = 0.48$ ) were very similar.

### **Parent Perspectives**

In the comparison of weighted means from the parent surveys, there were generally no significant differences found at either follow-up wave between the parents of youth who attended



**Table 3.5**  
**Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Military Culture and Connection to Military Peers, Youth Survey**

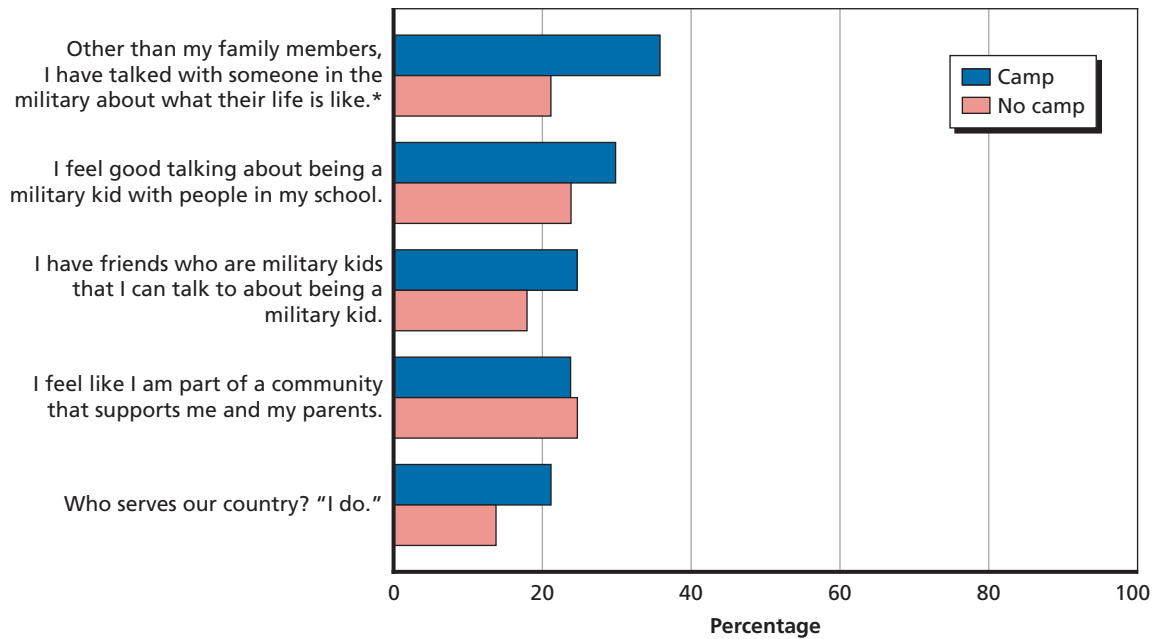
Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
I feel like I am part of a community that supports me and my parents.	1.7	1.8	1.7	1.7
I have friends who are military kids that I can talk to about being a military kid.	1.9	1.9	1.9	1.9
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.7	1.7	1.6	1.6
Other than my family members, I have talked with someone in the military about what their life is like.	1.8 <sup>a</sup>	2.1	1.9	2.0
Who serves our country? "I do." <sup>b</sup>	0.3	0.3	0.3	0.3

NOTE: Lower mean equals better score.

<sup>a</sup> Denotes relationships that are statistically significant after adjusting for multiple testing.

<sup>b</sup> For this outcome, the mean is the percentage who chose this response option.

**Figure 3.3**  
**Youth-Reported Improvement in Understanding of Military Culture and Connectedness to Military Community**



\*Denotes relationships that are statistically significant after adjusting for multiple testing,  $p < 0.01$ .

NOTE: Percentages represent improvement from baseline to wave 2.

camp and the parents of those who did not. There was one trend toward significance among parents of youth who attended camp who reported that their child was able to talk with a servicemember outside of the family about military life (see Table 3.6).

However, when exploring the improvement using dichotomized outcomes, a few other differences emerged at first follow-up (wave 2) between the camp and no-camp groups. There was a notable difference in parent reports that their child felt an improved sense of community and connection to a military network one month after camp. Specifically, 27 percent of camp parents reported that their child felt a greater sense of community, compared with 16 percent of no-camp parents ( $p = 0.004$ ) at the first follow-up, though this sentiment did not persist at the later follow-up assessment (wave 3). These findings were maintained among the subsetted group of the truly non-exposed sample.

While we balanced on baseline survey responses within the parent and youth samples, the difference between parent and youth reports of improvement may be explained by the fact that parent reports at baseline on this outcome were lower (“worse”) than youth reports. Thus, there may be greater opportunity for improvement on the scale for parent reports of sense of community post-camp.

### Open-Ended Question Results

Increasing familiarity with military culture was also highlighted in both parent and youth responses to our open-ended question about the benefits of Operation Purple camps. A small sample of parents and youth described how learning about the deployed parent’s protective equipment helped youth feel more at ease about their parent’s deployment and how the program helped increase military pride among camp attendees. Thirty-four parents and 16 youth said that the Operation Purple camp had helped the youth become more familiar with military culture. Eight youth also said that they learned that “kids serve, too,” which is a specific message promoted by the program.

**Table 3.6**  
**Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Military Culture and Connection to Military Peers, Parent Survey**

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.8	1.9	1.8	1.8
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	2.1	2.0	1.9
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.6	1.7	1.6	1.6
Other than my child’s family members, he/she has talked with someone in the military about what their life is like.	2.2 <sup>a</sup>	2.4	2.2	2.0

NOTE: Lower mean equals better score.

<sup>a</sup> Denotes relationships for which the p-value was less than 0.05 but greater than the Bonferroni-adjusted cutoff for determining statistical significance.

Among the four themes reported in this study, connecting with other military youth was among the most noted among parents whose children attended camp and among the youth who attended the camp. Just over half (51 percent) of the parents reported that connecting with military peers was one of the benefits of attending an Operation Purple camp. One-quarter of parents (n = 69) reported that their child was able to make new friends at the camp. In fact, some parents reported that their child felt isolated and unable to connect with children in their community because he or she felt that nonmilitary youth did not understand what it is like to be a military youth. The following quote illustrates the sentiment shared by other parents:

[My child] said that being with other kids that have deployed parents made him feel better. He doesn't have any other kids around him with deployed parents. When he attends operation purple events he knows that there are going to be other kids who are going through what he is going through. The operation purple camp was a great experience because it gave [him] an opportunity to be part of the majority, instead of the minority. He doesn't like being away from the house for any reason, but he has already said that he would go to another camp next year if it was like the one [he attended]. Thanks for all you do for these kids.

Of the youth who responded to the open-ended question about the benefits of Operation Purple, 83 (46 percent) said that they were able to connect with other military youth. Making friends was also noted by youth respondents, with 26 specifically citing this as a benefit of camp attendance. Connecting with other military youth and making friends occurred in a time in one youth's life when things were new and unfamiliar:

It helped me get to know other kids in my area that are going through the same thing. We just moved here . . . and I didn't have a lot of friends yet. Now I have a lot more and I can't wait to try for camp next year.

### **Curriculum Implementation of Military Culture Components**

Among the four outcome areas, this was the least discussed in the AARs. Despite the small amount of data available, the range of activities that reinforced this theme varied widely. However, the camps did dedicate several hours (e.g., all afternoon) to addressing this theme. The most common activity in this area was direct engagement in discussions with military personnel. Twenty-two of the 32 camps reported direct engagement between campers and military personnel that involved discussions about military life, deployment experiences, and use of military equipment (e.g., helicopter, weapons, flags). At least two camps reported that campers were able to meet trained military dogs. Of the 32 camps, 11 reported engaging in activities throughout the week that promoted military-related experiences and culture and that encouraged campers to share their questions about military life. For instance, one camp reported that campers were able to participate in rock-wall climbing to "promote physical and mental fitness." Another reported that campers were encouraged to describe the "neat" aspects of meeting other military youth whom they could consider part of their military family. According to the available data, there were no barriers in implementing this component.

## Sense of Service/Stewardship

A third outcome area was to instill in camp participants a sense of service and commitment to community. Table 3.7 presents the results from the comparison of weighted mean outcomes at waves 2 and 3 among the youth respondents in the camp and no-camp groups. Table 3.8 shows comparable data from the parent survey. Lower means indicate higher confidence or knowledge about a given item.

### Youth Perspectives

For both the comparison of weighted means and dichotomous outcomes, there was no significant difference between campers and non-campers with respect to trying to help people in need and helping other military kids who may need help. For example, at wave 2, the comparison between the camp and no-camp groups on the “helping people in need” item was 1.8 in the camp group versus 1.7 in the no-camp group ( $p = 0.62$ ) (see Table 3.7). These findings persisted in the subsetted analyses of youth with no prior camp experience.

### Parent Perspectives

There were also no significant differences among parent perspectives in both the comparison of weighted means and dichotomous outcomes in the full sample (see Table 3.8 and Figure 3.4).

The findings were generally consistent in our analyses of the subsetted youth with no prior camp experience, with one exception. Among the subsetted (purely non-exposed) group,

**Table 3.7**  
Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Sense of Service/Stewardship, Youth Survey

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
I try to find ways to help people who need help.	1.8	1.7	1.7	1.7
I try to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.1	2.3	2.0	2.1

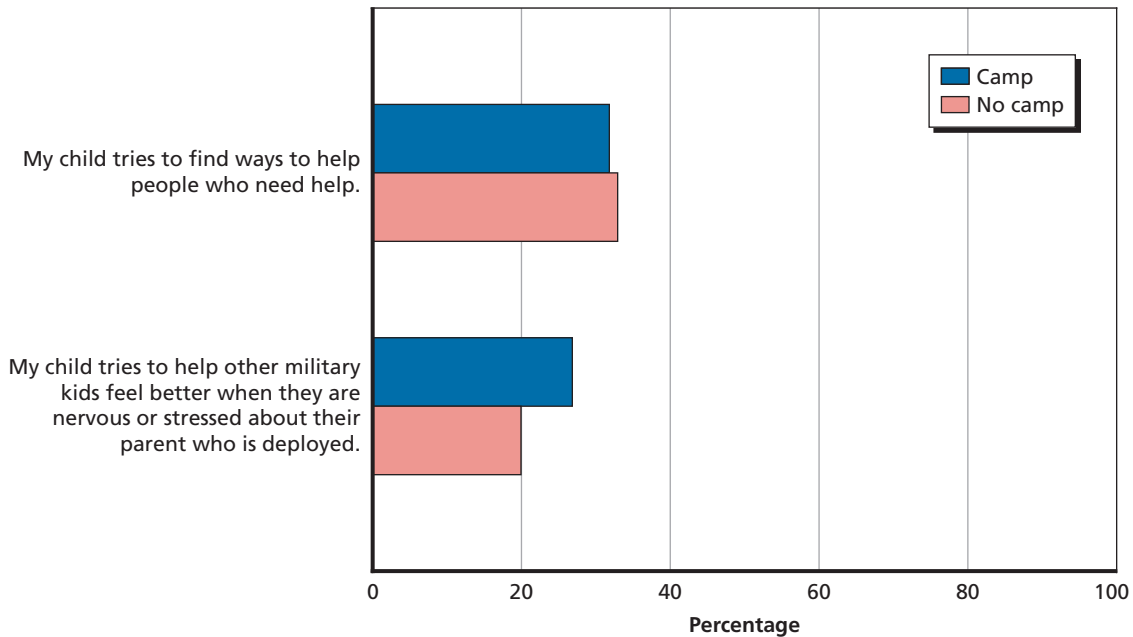
NOTE: Lower mean equals better score.

**Table 3.8**  
Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Sense of Service/Stewardship, Parent Survey

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
My child tries to find ways to help people who need help.	1.7	1.8	1.7	1.7
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.0	2.2	2.0	1.9

NOTE: Lower mean equals better score.

**Figure 3.4**  
**Parent-Reported Youth Improvement in Sense of Service/Stewardship**



NOTE: Percentages represent improvement from baseline to wave 2.

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a greater percentage of camp parents reported that their child wanted to help people more after camp participation than did the no-camp parents at wave 2 (31 percent of camp parents versus 16 percent of no-camp parents,  $p = 0.002$ ). This finding did not persist at the second follow-up (wave 3).

### Open-Ended Question Results

Results from the qualitative data analysis indicate that a few youth and parents observed changes in the youth's sense of stewardship as a result of camp attendance. Stewardship encompasses a sense of service within one's community, as well as a connection within the military community. Of the 270 parents who responded to the wave 2 survey, 30 (11 percent) reported that they observed improvements in their child's attitude either about his or her role in the home, his or her role as a member of a larger community, or his or her sense of connection to the military as a result of participating in an Operation Purple camp. One parent noted,

Operation Purple has helped my youth learn to become a better citizen and example in his community. We do not live in a community where his friends are military so it has also given him other friends who can identify with military life.

Eight of the 175 youth also reported an increased sense of service.

### Curriculum Implementation of the Sense of Service/Stewardship Components

Operation Purple defines *stewardship* as activities that include the self, others, community, and the environment and the promotion of open discussion regarding the pressures and stressors of military life. According to data extracted from the AARs, camps were able to promote the

concept of stewardship, as defined by Operation Purple, through several practical and creative activities. Camp activities included daily routines, such as camp and cabin clean-up; discussions about trash and waste; and practices for leaving no trace at campgrounds and in dining halls, cabins, and the surrounding area. Campers also engaged in related activities throughout the week. For example, several camps reported reinforcing the concept of stewardship at the individual level. Campers were encouraged to practice good personal hygiene, drink plenty of water, wear sunscreen, and find ways to connect with other campers. At the community level, campers were encouraged to help prepare meals, collect firewood, help care for animals residing at the camp (e.g., horses), and help maintain clean cabins. Community-level activities also included a special project that often involved the campground and members of the military community. For instance, camps reported that participants wrote letters to deployed servicemembers and veterans. Environmental projects focused on conservation of the camp, limiting waste, and finding ways to give back to the youths' local communities. One particular camp encouraged campers to "talk trash" and discuss ways to reinforce conservation activities, such as recycling.

## Outdoor Education

The fourth outcome area was engaging youth in outdoor activities, which included education about the environment and related conservation themes, as well as a general appreciation of being outdoors. Table 3.9 presents the results from the comparison of weighted mean outcomes at waves 2 and 3 among youth respondents in the camp and no-camp groups. Table 3.10 presents comparable data from the parent survey. Recall that lower means indicate higher confidence or knowledge about a given item.

### Youth Perspectives

There were no statistically significant differences between the camp and no-camp groups on the main items related to outdoor education included in the wave 2 and 3 surveys (see Table 3.9 and Figure 3.5).

As described in Chapter Two, we added a few items about the "importance" of certain outdoor or environmental activities in the final follow-up survey (see Appendix G). Thus, we cannot report changes from the baseline. However, notably, there were some differences on these items between the camp and no-camp groups. At wave 3, more campers felt that it was more important to be prepared for outdoor activities ( $p = 0.01$ ) and to leave rocks and other objects where they are ( $p = 0.03$ ), thereby suggesting a trend.

### Parent Perspectives

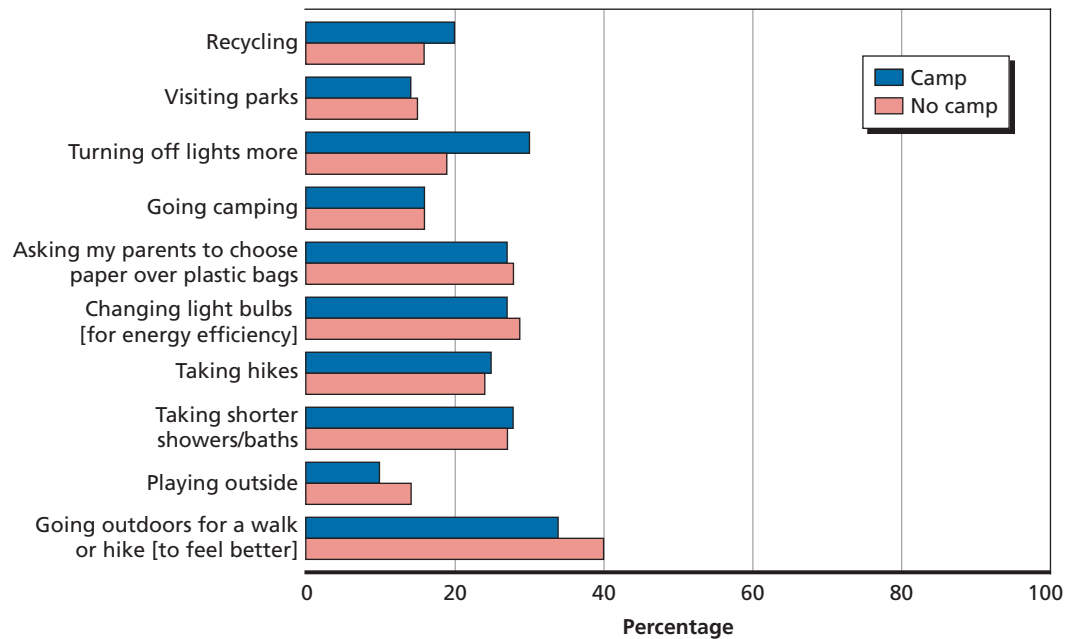
Parents noted some change in their child following camp, although these findings were not statistically significant after adjusting for multiple testing. At wave 2 and wave 3, camp parents reported greater youth interest in camping (see Table 3.10). For example, 30 percent of camp parents reported an improvement in this outcome at the first follow-up survey, compared with 22 percent of no-camp parents ( $p = 0.028$ ), suggesting a trend. This was true among the subsetted sample as well (see Appendix G).

**Table 3.9**  
**Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Outdoor Education, Youth Survey**

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
How often do you do the following at home?				
Recycling	1.6	1.7	1.7	1.7
Visiting parks	2.0	2.1	2.2	2.2
Turning off lights more	1.8	1.8	1.8	1.9
Going camping	2.8	2.9	3.0	3.0
Asking my parents to choose paper over plastic bags	2.9	3.1	3.0	3.0
Changing light bulbs [for energy efficiency]	3.1	3.2	3.1	3.1
Taking hikes	2.6	2.7	2.6	2.7
Taking shorter showers/baths	2.1	2.2	2.2	2.3
Playing outside	1.5	1.5	1.6	1.7
When I feel upset about my parent being deployed, I go outdoors for a walk or hike [to feel better].	2.6	2.8	2.8	2.7

NOTE: Lower mean equals better score.

**Figure 3.5**  
**Youth-Reported Increase in Outdoor and Conservation Activity Participation**



NOTE: Percentages represent improvement from baseline to wave 3.

**Table 3.10**  
**Weighted Means for Comparison of Camp and No-Camp Groups on Survey Items Pertaining to Outdoor Education, Parent Survey**

Survey Item	Wave 2		Wave 3	
	Camp Mean	No-Camp Mean	Camp Mean	No-Camp Mean
How often does your child do the following at home?				
Recycling	1.7	1.6	1.7	1.7
Visiting parks	1.9	2.0	2.2	2.1
Turning off lights more	1.9	2.1	1.8	2.2
Going camping	2.7	2.9	3.0	3.0
Asking his/her parents to choose paper over plastic bags	3.2	3.1	3.0	3.2
Changing light bulbs [for energy efficiency]	3.3	3.4	3.1	3.4
Taking hikes	2.6	2.7	2.6	2.8
Taking shorter showers/baths	2.4	2.5	2.2	2.6
Playing outside	1.6	1.6	1.6	1.7
When my child feels upset or stressed out about his/her parent being deployed, he/she goes outdoors for a walk or hike [to feel better].	3.0	3.0	2.8	2.8

NOTE: Lower mean equals better score.

### Open-Ended Question Results

Some parents and youth reported the positive benefits of these activities. Specifically, 20 parents and 23 youth reported that the experiences related to outdoor activities and education were among the main benefits of camp attendance. Youth and parents also reported that the camp was fun and that it exposed youth to new and exciting outdoor activities (26 parents and 23 youth). For example, according to one youth,

I really enjoyed water sports and bracelets. We sang a lot and we walked a lot. . . . I was stronger than almost any other girl and we went through [an] obstacle course or a confidence course.

One parent reported,

Operation Purple helped [my child] by allowing him to enjoy the outdoors and see that he doesn't need electronics all of the time. He loves to camp and do outdoor activities and this was his chance to do these things on his own.

### Curriculum Implementation of the Outdoor Education Components

This final outcome includes outdoor education (i.e., being aware of surroundings and learning about local ecology) and Leave No Trace principles. There are several principles associated with Leave No Trace that reinforce outdoor education and promote conservation, which includes being aware of rules and regulations, planning for weather conditions, and mapping



one's route. Other principles involve the appropriate disposal of waste, which calls for the proper packing and repacking of personal items, including food and trash; respecting wildlife by keeping an appropriate distance; minimizing the lasting impact of campfires; and being considerate of others visiting the campground. According to information gathered from the AARs, all 32 camps reported at least one activity associated with Leave No Trace principles and outdoor education.

With regard to outdoor education, camp activities included discussions about land erosion, outdoor cookouts that involved conversations about the woods and safe fire practices, discussions about the local ecology (e.g., beaches), ongoing discussions about conservation of the environment (specifically, reducing waste and recycling), taking hikes, and participation in "My Life as a Tree" exercises. The Leave No Trace principles were interwoven into outdoor education activities and were reinforced on various occasions, including Military Theme Day, and during daily activities (e.g., cleanup). A few camps reported giving awards to cabins that implemented the Leave No Trace principles. Only one camp noted that the principles appeared to be most appropriate for middle-school and older camp participants. Otherwise, no barriers to implementation were noted.

## Youth and Parent Reports of Operation Purple's Benefits

Results from our qualitative data analysis indicate additional positive, secondary benefits from attending camp that might not be fully captured by the quantitative analyses. Such additional benefits included increased confidence, increased independence, additional coping strategies to deal with feelings associated with a parent's deployment, and a break from the stress of being a military youth.

Sixty-seven parents (25 percent) said that their child returned home from camp feeling or behaving more confidently. Fifteen of the 175 youth reported that they felt more confident after camp. According to our analysis, it seems that youth were able to relate this increased confidence to specific camp experiences, whereas parents reported that their child seemed more confident after returning home from camp, suggesting that one or more aspects of the camp contributed to this change. A common response was, "My son returned more confident in himself and his abilities." Among youth, "[Camp] helped me build myself as a man."

In addition to increased confidence, 20 parents reported that their child returned from camp feeling and behaving more independently. The following quote illustrates the sentiment clearly:

Operation Purple helped [my child] become more independent. The counselors encouraged him to be brave and to always try new things.

Parents and youth also reported that camp attendance helped youth feel better equipped to cope with feelings related to deployment, with 53 parents (20 percent) and 49 youth (28 percent) noting this change. The strategies employed by camps included using distraction to reduce anxiety about a parent's deployment, encouraging youth to talk about their feelings about the deployment, helping youth recall that they are not alone in this experience, and helping them understand the important role played by deployed parents. According to one youth respondent:

[Camp] has helped me realize that other kids are experiencing what I am. It is good to see how they cope with it, and talk about other stuff. Doing activities in purple camp gives me stuff to talk about and keep my mind off of other things.

A fourth benefit was learning to take a break or having a reprieve from the stress of being a military youth. Twenty parents reported this as a benefit of camp attendance. The following quote captures this benefit:

Operation Purple helped my daughter by giving her a week to not have to worry about chores, fighting with her brother and sister, feeling lonely because there is no one her age in our neighborhood she can talk to or relate to.

It is important to put these findings into context. These data are qualitative, and, as we mentioned, youth and parents who responded to the open-ended questions also tended to respond with more confidence and knowledge on other items in the survey (see Appendix B). Thus, responses to the open-ended questions may overemphasize the positive benefits of camp for the more general population in our analyses.

### **Where Families Go for Support**

In addition to asking parents and youth about the benefits of camp attendance, we asked the control group (the no-camp group) about the resources they used during the period. We created a matrix to capture the range of responses provided by parents and youth who responded to the open-ended questions. Of the 277 parents of youth who did not attend camp in 2011, the results indicate that four primary resources were used: family, other (nonmilitary) camps, military resources, and friends. According to our analyses of the data, 74 parents reported that they relied on family living nearby or out of state to support and engage their child. Among the 277 parents, 50 reported that they enrolled their child in a nonmilitary camp, such as Boy Scouts. Thirty-four parents reported that they were able to enroll their child in another military-sponsored camp or other military-sponsored activities (e.g., youth programs on base). Twenty-four parents (not mutually exclusive) said that their child engaged in outdoor activities, such as camping, and 13 parents said that their child relied on friends for support.

We were also able to ascertain which resources were used by youth who did not attend an Operation Purple camp in 2011. Results from the qualitative analyses based on 163 youth responses indicate that the vast majority relied on a family member, including the deployed parent, and friends as a source of support.

### **Why Operation Purple Is Important to Families**

During the last wave of data collection, all study participants were asked why they thought the Operation Purple camp was important. Of the wave 3 respondents, 484 parents and 419 youth responded. Three primary themes emerged from the parent data: The camp helped youth make connections with other military youth, it encouraged social and personal growth, and it offered a reprieve for both parents and youth. Much like responses reported earlier, parents noted that participation in an Operation Purple camp gave youth an opportunity to connect with other military youth who have shared experiences and with whom they can make “lasting connections.” Parents also noted that, in many cases, their child was the only military child in their neighborhood, which was particularly true for National Guard and reserve families. They

also noted that Operation Purple camps provided a natural environment where youth with a common family experience can come together and feel connected and supported. Parents also said that the program offered youth experiences that supported personal and social growth, including building confidence. With regard to the third response theme, parents noted that their child experienced stress from deployment and family obligations and that Operation Purple provided a reprieve from those stressors; the break was also beneficial to parents. One parent's quote summarizes the themes that were identified across the 484 parent responses:

Operation Purple is critical for kids and families. I think it is especially important to Guard and Reservist families, who may not have other military families close by who understand what the family is going through. Camp provides a safe place for kids to be kids, talk about what it is like to be a military kid, and deal with stress related to deployments.

Among youth, the opportunity to connect with other military youth was also a prevalent theme. Youth stated that Operation Purple was important because it provided tools for coping with deployment, could give them answers about why deployments occur, and taught them about deployment to help calm their fears. One youth said, "[Operation Purple] . . . teach[es] kids how to feel better when they are scared about their parents being away." A third theme that emerged was the psychological and emotional relief that the Operation Purple camps offered. Like the other benefits noted here, youth reported that Operation Purple camp is important because it gives youth a place where they can have fun, take their minds off their parent's deployment, and be with youth who know what it really means to be part of a military family. According to one youth,

The camp really helped me connect to other kids going through the same problems. I learned so much and really was able to forget my family problems for the week I was at camp! It also helped my mom!

Another youth echoed this sentiment:

Operation Purple Camp can help children and families by [helping] their mind to not think of the person that's overseas. Also, it helps keep them active and safe. They also would have lots of fun if they attended, like I did.

Table 3.11 summarizes the key findings from the responses to the open-ended question, with attention to the four camp outcome areas and the secondary benefits discussed earlier. Specifically, as in the survey data, compared with youth, parents tended to report more benefits to youth participants related to the four objectives (e.g., military culture). Similarly, parents reported more secondary benefits did the youth respondents.

**Table 3.11**  
**Summary of Open-Ended Responses for Camp Outcome Areas and Other Secondary Benefits, Parent and Youth Surveys**

Response	Percentage	
	Parent (n = 270)	Youth (n = 175)
Camp Objectives		
Communication (discussing feelings about deployment-related stress)	11	8
Military culture	13	9
"Kids serve, too"	Not reported	5
Connecting with other military youth	51	46
Making new friends	69	15
Sense of service	11	5
Outdoor education	7	13
Secondary Benefits		
Greater youth confidence	25	9
Greater youth independence	7	Not reported
Better equipped to cope with parental deployment	20	28
Relieve	7	Not reported



## Conclusions

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The evaluation of the Operation Purple® summer camp program revealed that, from the parental perspective, the principal impacts of the program relate to youth comfort and ability to communicate about feelings of deployment-related stress. For the other outcome areas, effects were mostly minimal or not detected. Effects associated with camp attendance were modest with respect to feeling connected to a supportive military community, and we did not identify effects related to an appreciation of outdoor education or sense of service/stewardship. For most outcomes, effects persisted at the first post-camp follow-up survey (one month later) but not three months later. In this chapter, we present our conclusions based on our initial hypotheses in the four camp theme areas and the possible reasons for our results. The discussion also explores why the findings may not have persisted at wave 3 and why the findings might be stronger among parent respondents than among youth respondents. Finally, we discuss the limitations of our analyses and possible future directions for evaluations of programs like Operation Purple.

### Key Conclusions

At the outset of our analyses, we articulated two key hypotheses. First, we posited that youth who attended camp would report greater improvement in each of the four outcome areas (communication, understanding of military culture and connection to military peers, sense of service/stewardship, and outdoor education). Second, we argued that youth who attended camps with a greater emphasis on each of the four camp themes would report greater improvement than those who attended camps that did not have as strong a focus on a particular theme. As discussed in Chapter Two, we were ultimately limited by how we could quantitatively address the second hypothesis because of issues of data reliability and general variability. As such, we place our discussion of the first hypothesis in the context of the extent to which camps emphasized a particular theme, using data that were intended to inform the second hypothesis.

#### **Comfort and Skill in Communicating Feelings About Deployment-Related Stress**

Most notably, this was the outcome area in which the greatest difference was observed in comparing campers with non-campers, though this finding was based on parent reports only. Parents of camp participants reported a greater sense that their child had the tools to communicate how he or she was feeling and had strategies to manage stress when anxious about parental deployment. However, according to the survey data, the camps did not appear to have any impact on coping strategies, such as journal writing, which is one objective of the camp

in this theme area (see Table 1.1 in Chapter One). It may be very difficult to change levels of engagement in this type of activity after a one-week camp.

It is important to place these findings in the context of prior research and the AARs. As discussed earlier, camps that bring together youth in similar, potentially stressful situations are often very effective in helping youth deal with these feelings by virtue of providing the outlet to express those concerns (Creed, Ruffin, and Ward, 2001; Goldman, 2004). According to the AARs, nearly 90 percent of Operation Purple camps reported providing several activities to emphasize this theme, including an activity focused on the expression of feelings. However, only nine of the camps reported that campers engaged in these communication activities every day. This may help explain why there were not more differences in the camp group between the baseline and follow-up surveys, particularly from the youth perspective. In future camps, it may be beneficial to consider how these expression activities are reinforced and how frequently they are offered during the weeklong program. In addition, it will be important to carefully capture information about the recommended activities in a more systematic way. As mentioned earlier, the AARs provided some information about the implementation of communication-focused activities, but camp directors were not required to report on the specific activities offered or the frequency and duration of those activities. By capturing these details, one can better assess variability across camps, the extent to which exposure has an impact on youth outcomes (e.g., comfort expressing feelings), and which activities have the greatest impact.

### **Military Culture and Connection to Military Peers**

The difference between youth who attended an Operation Purple camp and those who did not was comparatively minor in this outcome area, but once again, parent-reported impacts were more pronounced than those cited by youth respondents. Operation Purple camps offered an opportunity for campers to meet with servicemembers outside the family; this was not experienced by the no-camp group. This activity is a cornerstone of the camps, which seek to provide a space for youth to pose questions about the military and deployment. This discussion space may not be available with a parent or other family member because of a lack of comfort or time. There were no significant differences between the two youth groups with respect to feeling as if they were part of a military community or feeling like they now had military peers with whom to connect. However, this may be explained by the fact that youth in both groups started at a fairly high place on the scale. In other words, most youth reported that they already had some feelings of connectedness to military culture and peers, even among the Guard and reserve youth. For example, 40 percent of the baseline sample reported “always” feeling good talking about being a military kid with other people in their school, and 50 percent reported feeling this way “sometimes.”

Parents, on the other hand, noted that their child felt a greater sense of community after camp. One reason for this finding relative to youth responses could be that parents generally rated this item lower (or “worse”) at baseline; thus, parents’ perspectives had more opportunity for improvement post-camp. Another reason for the lack of strong effects associated with this outcome among the camp group could be linked to the fact that the AARs discussed these activities very little, suggesting limited emphasis on these topics. However, the AARs also noted few barriers in implementing the activities. Thus, it is unclear whether they were truly deemphasized or whether the activities did not have as much resonance with youth who already had this information about military culture. The level of emphasis on specific activities and the extent to which the activities were included in the camp curriculum should be

captured in future implementation and fidelity measures (i.e., AARs and LVs). For instance, the AARs should include a camp director interview that queries the type of activities carried out, the objectives of such activities, the frequency of those activities, and, possibly, camper responses (e.g., level of engagement). Despite the limited findings, results from the qualitative data provided by youth and parents suggest that there were some benefits in this area, but they were comparatively few and should be interpreted with caution.

### **Sense of Service/Stewardship**

For both youth and parents, there was no significant difference between camp and no-camp groups in this outcome area. There are several potential reasons for this. First, the civic engagement literature indicates that it takes time to change attitudes about stewardship and commitment to community (Otis, 2006; Bers and Chau, 2006), so it is possible that this cannot be accomplished in a one-week camp alone. Second, the youth in our sample reported rather frequent engagement in these types of behaviors at baseline, so change over time was difficult to discern. Finally, according to the AARs and how camps chose to implement this camp theme, there was great variability in the types of activities employed by the camps (e.g., letter-writing, conservation). Our survey questions may not have captured the likely impact of these activities or may not have been specific enough, given the range of camp activities that were ultimately implemented to address this theme. To address this potential limitation, the implementation and fidelity tools should be designed to capture whether and how those recommended activities are being implemented. This will allow comparisons across all campsites.

### **Outdoor Education**

There was little movement on these items between the baseline and follow-up surveys. The only item that resonated after camp—according to parent responses alone—was an appreciation for camping, and this was only a trend. As described earlier, we included additional items in the wave 3 survey regarding the importance of environmental activities; these items appeared to show greater differences between the camp and no-camp groups.

Once again, the AARs may be instructive regarding the few differences observed for outdoor education. All camps reported at least one activity related to Leave No Trace, but it is unclear how many environmental appreciation activities were conducted and how consistently. In addition, engagement in these activities after camp may depend on a host of variables that we were unable to capture, such as proximity to parks and campgrounds and parental time to continue these activities with youth. Further, it may be difficult to “move the bar” on conservation-related sentiments, because youth are increasingly exposed to these principles in school. Thus, it may be unreasonable for a one-week camp to contribute to significant change in responses to these questions. Yet, it may be beneficial to learn which activities, if any, had the most impact. We recommend that camps increase their efforts to capture whether such activities are being conducted and the degree to which they are being implemented as recommended.

As noted in Table 3.11 in Chapter Three, a higher proportion of parents noted benefits related to each of the four themes. Parents were also more likely to report interpersonal growth among campers. For instance, a higher proportion of parents than youth reported that campers demonstrated increased appreciation of military culture. Parents also reported more secondary benefits, such as increased youth confidence and independence.



## Study Limitations

As with any study, it is important to acknowledge key limitations in our study design. First and foremost, we were unable to use random assignment to the camp and no-camp groups because of the camp acceptance process. Although we weighted the samples based on demographic and baseline factors that we believed were among the most important for the outcomes of interest, there is always a chance that we missed some unobserved difference between the two groups (for example, if we had asked for more detailed information about deployment history). However, our quasi-experimental evaluation design was more robust than other military youth program evaluations that do not have a control or comparison group (Beardslee, Lester, et al., 2011; Lester, Peterson, et al., 2010; Lester, Mogil, et al., 2011; Lester, Saltzman, et al., 2012). We were also limited in our ability to construct a camp fidelity measure. While we attempted to use the AAR and VL data, the quality and validity of those data and the inability to conduct an independent assessment of theme implementation (because of resource constraints) hindered the extent to which we could incorporate these fidelity data in our analytic models. We used the AAR and VL data to contextualize our findings, but we acknowledge that a more complete implementation analysis would have strengthened our design. For instance, while visitors were required to provide specific information, the data were not assessed for accuracy, the time of the visits was not standardized, and all four camp themes were not assessed during each visit.

Finally, we note that youth who apply to camp (regardless of attendance) may already be distinct from other military youth, thus limiting our ability to generalize to the broader military youth population. As described in earlier analyses of Operation Purple camp data (Chandra, Lara-Cinisomo, et al., 2010; Chandra, Lara-Cinisomo, et al., 2011; Burns, Chandra, and Lara-Cinisomo, 2011), youth who apply to camp may come from families that are more in need (thus applying for camp) or less in need (sufficiently organized to find the camp resource in the first place). In the context of this program evaluation, this selection issue may also explain why a more significant change from baseline to the follow-up survey was not observed. Possibly, youth and parents who applied to Operation Purple started at a higher level of comfort and exposure to military culture than families that did not. Also, as previously discussed, some of the items (e.g., environmental appreciation, journaling) may be difficult activities through which to change attitudes over the one-week camp period. Finally, qualitative data from the open-ended questions are likely to overemphasize the positive aspects of camp, given that youth and parents who responded to the open-ended question tended to endorse survey items with more confidence and knowledge than those who did not.

## Summary

This evaluation of Operation Purple camp provides valuable information on effects associated with a popular military youth program and begins to address the gap in evaluation data in this area. Further, the study provides insight into youth outcomes that may inform the broader camp evaluation research base. While some of the intended impacts of the camp were not realized among our study sample, the analysis did identify some key improvements among those who attended camp, even one month later. This improvement was particularly salient in the outcome area related to communication about feelings, which most closely aligns with current

research indicating that parental deployment is associated with greater anxiety symptoms and general stress among youth (Flake et al., 2009; Lester, Peterson, et al., 2010; Chandra, Lara-Cinisomo, et al., 2010; Chandra, Lara-Cinisomo, et al., 2011). Providing a space where youth can express their feelings about deployment-related stress is important. Further, while the findings were not statistically significant, there was some marginal difference between groups with respect to military connectedness and sense of community.

In addition, parents generally reported that their children experienced greater improvement than youth reported themselves. There are a few possible explanations for this. Parents may observe differences in youth that are more difficult for youth to discern for themselves. On the other hand, parents may be more inclined to report positive changes in their child because they have specific expectations about the camp's benefits. While our analysis focused on parent reports of youth benefit, additional research could explore effects associated with camp for parents. As mentioned in Chapter One, the camp may offer a respite or "break from children," which then translates into a post-camp period in which parents and youth are better able to communicate with each other because they had the separation. Future research could explore this issue in more detail, along with the youth benefit related to interpersonal growth. As noted in Chapter Three, campers and their parents reported additional benefits (e.g., increased confidence) that should be specifically targeted in future studies.

The lack of persistence of camp benefits at the three-month follow-up argues that a one-week camp may not have a lasting impact in these outcome areas. Perhaps if additional supports or "booster" opportunities were provided, these impacts would persist. Subsequent intervention development and associated research should explore whether and how these improvements could be maintained. For example, a longer program could be developed, or there could be more follow-up with youth after camp. In addition, future program implementation and assessment should consider the unintentional or secondary benefits identified in the qualitative data reported by parents and youth (e.g., increased confidence). Given responses to the final open-ended question about why Operation Purple camp is important to families, it is critical for future program development to ensure that the curriculum addresses the needs noted in the surveys. This includes key components already included in the camp curriculum, such as the opportunity to connect with other military children, learn about deployments and how to cope, and experience a reprieve from the stressors associated with deployment.



## Parent and Youth Surveys

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This appendix presents the full text of the parent and youth surveys for the final follow-up survey (wave 3). We note which items were added in the first follow-up survey (wave 2) and which were added to the second follow-up survey only (wave 3). Items that do not have a note or asterisk represent the baseline survey.

## Operation Purple Camp—Parent Survey

Thanks for taking this survey. We would like to begin by asking a couple questions about your child's past camp experience. *Please only respond based on the child selected for this study, as noted in your email invitation.*

1. Please enter the five-digit PIN provided in your email invite.

There are two ways to find the PIN. It is in your email as the PIN. Or, this is the last five digits (after the "c") in the survey link from your email invite (e.g., 00001). In this example, <https://www.research.net/s/BCBFMZ?c=00001>, the PIN would be 00001. The PIN is only for linking your response from survey to survey.

2. How old is your child (only refer to child who was selected for this study in your email invite)? Please choose one answer.

- 10 years old
- 11 years old
- 12 years old
- 13 years old
- 14 years old
- 15 years old
- 16 years old
- 17 years old

3. Is your child a boy or a girl?

- Boy
- Girl

4. Did your child attend Operation Purple Camp this year (2011)?

- Yes
- No
- Don't know

5. Do you plan to apply to Operation Purple Camp in 2012 for your child (who is part of this study) or for any child in your family?

- Yes
- No
- Don't know

Next, we would like to ask you a few questions about your child's parent deployment history for the last six months.

6. Did your child’s parent start a new deployment or go on a subsequent deployment between April 2011 and October 2011?

- Yes
- No
- Don’t know

7. Did your child’s parent return from deployment between April 2011 and October 2011?

- Yes
- No
- Don’t know

Thanks. Now, we are going to ask you a few questions about how your child might talk about his/her feelings.

8. My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent’s deployment. Please choose one answer.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all/never

9. I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent’s deployment. Please choose one answer.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all/never

For each item, check how often your child does each of the following.

10. When my child feels upset or stressed out about his/her parent being deployed, he/she

	<b>Almost all of the time</b>	<b>Sometimes</b>	<b>Once in a while</b>	<b>Not at all/never</b>	<b>Don’t know</b>
(a) Sits in his/her room by him/herself and thinks					
(b) Talks to me or his/her other parent about how he/she feels					
(c) Talks to friends (on the phone, email/text, or in person) about how he/she feels					
(d) Cries					
(e) Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels					

For each item, check how often your child does each of the following.

11. When my child feels upset or stressed out about his/her parent being deployed, he/she

	Almost all of the time	Sometimes	Once in a while	Not at all/ never	Don't know
(f) Gets angry					
(g) Goes outdoors for a walk or hike					
(h) Writes his/her thoughts down in a journal or diary					
(i) Does something creative (draw, act, music)					
(j) Plays sports					
(k) Just doesn't think about it at all (puts it out of his/her mind)					
(l) Plays video games					
(m) Calls or writes his/her parent who is deployed to tell him/her how he/she feels					

12. My child tries to find ways to help people who need help. Please choose one answer.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all

Thanks! Next, we would like to ask you some questions about your child having a parent in the military.

13. My child feels like he/she is part of a community that cares about him/her and his/her parents. Please choose one answer.

- Always true
- Somewhat true
- Not true

14. My child has friends who are military kids that he/she can talk to about being a military kid. Please choose one answer.

- Always true
- Somewhat true
- Not true

15. My child gets nervous because he/she doesn't know about what his/her parent is doing during deployments. Please choose one answer.

- Always true
- Somewhat true
- Not true

16. My child doesn't feel nervous about his/her parent when he/she deploys because my child has seen the equipment that protects his/her parent. Please choose one answer.

- Always true
- Somewhat true
- Not true

17. My child feels good talking about being a military kid with people in his/her school (teachers, other kids). Please choose one answer.

- Always true
- Somewhat true
- Not true

18. My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed. Please choose one answer.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all/never

19. My child can ask me and his/her deployed parent questions about the military and the war. Please choose one answer.

- Always true
- Somewhat true
- Not true

20. Other than my child's family members, he/she has talked with someone in the military about what their life is like. Please choose one answer.

- Yes, two or more people in the military
- Yes, but only one person
- No, he/she has not talked to anyone else

Now, here are some final questions about the environment and your child's experience doing activities outside.

21. In the last 3 months, how often has your child been interested in doing outdoor activities, like hiking, riding a bike, and taking walks?

- Almost all of the time
- Sometimes
- Once in a while
- Not at all



22. How often does your child do the following at home? Please choose one answer for each activity.

	Almost all of the time	Sometimes	Once in a while	Never	Don't know
(a) Recycling (like bottles, cans, paper)					
(b) Visiting parks					
(c) Turning off lights more					
(d) Going camping					
(e) Asking his/her parents to choose paper over plastic bags					

23. How often does your child do the following at home? Please choose one answer for each activity.

	Almost all of the time	Sometimes	Once in a while	Never	Don't know
(f) Changing light bulbs [for energy efficiency]					
(g) Taking hikes					
(h) Taking shorter showers/baths					
(i) Playing outside					

24. [Question included in wave 3 survey only] How important is it to your child to . . . ? Please choose one answer for each activity.

	Very important	Somewhat important	Not at all important
(a) Be prepared for outdoor activities			
(b) Stay on trails during hikes			
(c) Leave rocks and other object as you found them during outdoor activities			
(d) Respect wildlife			

25. If accepted, would your child be interested in attending Operation Purple Camp in 2012 (next summer)?

- Yes
- No
- Don't know

**All Parents**

26. [Question included in wave 2 survey only and posed to parents of campers] How do you think Operation Purple helped your child?

[Question included in wave 2 survey only and posed to parents of non-campers] Finally, given that your child did not attend Operation Purple, we would like to know what activities or resources you used this summer to help your child as a military kid (for example, other programs, other supports).

[Question included in wave 3 survey only and posed to all parents] Why do you think a camp like Operation Purple is important for children and families?

27. Please confirm your email address.

Thank you for your participation. We will contact you after your child has returned from camp. Thank you for filling out this survey!

## Operation Purple Camp—Youth Survey

Thanks for taking this survey. We would like to begin by asking a couple questions about you. Remember there is no right or wrong answer.

1. Please enter the five-digit PIN provided in your email invite.

There are two ways to find the PIN. It is in your email as the PIN. Or, this is the last five digits (after the “c”) in the survey link from your email invite (e.g., 00001). In this example, <https://www.research.net/s/BCBFMZXC=00001>, the PIN would be 00001. The PIN is only for linking your response from survey to survey.

Thanks for taking this survey. We would like to begin by asking a couple questions about you.

2. How old are you? (choose only one)

- 10 years old
- 11 years old
- 12 years old
- 13 years old
- 14 years old
- 15 years old
- 16 years old
- 17 years old

3. Are you a boy or girl?

- Boy
- Girl

Thanks. Now, we are going to ask you a few questions about how you talk about your feelings.

4. I know what to do to make myself feel better when I am nervous or stressed out about my parent's (family member's) deployment.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all/never

For each item, check how often you do each of the following.

5. When I feel upset or stressed out about my parent being deployed, I

	<b>Almost all of the time</b>	<b>Sometimes</b>	<b>Once in a while</b>	<b>Not at all/ never</b>
(n) Get angry				
(o) Go outdoors for a walk or hike				
(p) Write my thoughts down in a journal or diary				
(q) Do something creative (draw, act, music)				
(r) Play sports				
(s) Just don't think about it at all (put it out of my mind)				
(t) Play video games				
(u) Call or write my parent who is deployed to tell him/her how I feel				

For each item, check how often you do each of the following.

6. When I feel upset or stressed out about my parent being deployed, I

	<b>Almost all of the time</b>	<b>Sometimes</b>	<b>Once in a while</b>	<b>Not at all/ never</b>
(v) Sit in my room by myself and think				
(w) Talk to my parents about how I feel				
(x) Talk to my friends (on the phone, email/text, or in person) about how I feel				
(y) Cry				
(z) Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel				

Now we are going to ask you some questions about being a military kid.

7. I have friends who are military kids that I can talk to about being a military kid. Please choose one answer.

- Always true
- Somewhat true
- Not true

8. I feel better after talking to another military kid when I feel stressed or nervous because they know what it's like. Please choose one answer.

- Always true
- Somewhat true
- Not true

9. [Question added in wave 2 survey] When I do talk to a friend who is also a military kid, I do so using (check all that apply):

- Phone
- Email
- Text
- Facebook
- Other website

10. [Question added in wave 2 survey] How would you prefer to connect with other military kids? (choose all that apply)

- Phone
- Email
- Text
- Facebook
- Military kids website
- In person

11. I try to help other military kids feel better when they are nervous or stressed about their parent who is deployed. Please choose one answer.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all/never

Thanks! Next, we would like to ask you some questions about having a parent in the military.

12. I feel like I am part of a community that supports me and my parents. Please choose one answer.

- Always true
- Somewhat true
- Not true

13. I feel good talking about being a military kid with people in my school (teachers, other kids). Please choose one answer.

- Always true
- Somewhat true
- Not true

14. I get nervous because I don't know about what my parent is doing during deployments. Please choose one answer.

- Always true
- Somewhat true
- Not true

15. I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her. Please choose one answer.

- Always true
- Somewhat true
- Not true

16. I can ask my parents questions about the military and the war. Please choose one answer.

- Always true
- Somewhat true
- Not true

17. Other than my family members, I have talked with someone in the military about what their life is like. Please choose one answer.

- Yes, two or more people in the military
- Yes, but only one person
- No, I have not talked to anyone else

18. Who, of the following, serves our country? Check all that apply.

- My parent who is in the military does
- I do
- Other members of my family

19. I try to find ways to help people who need help. Please choose one answer.

- Almost all of the time
- Sometimes
- Once in a while
- Not at all

Now, here are some questions about the environment and your experience doing activities outside.

20. In the last 3 months, how often have you been interested in doing outdoor activities, like hiking, riding a bike, and taking walks?

- Almost all of the time
- Sometimes
- Once in a while
- Not at all

21. How often do you do the following at home? Please choose one answer for each activity.

	<b>Almost all of the time</b>	<b>Sometimes</b>	<b>Once in a while</b>	<b>Not at all/ never</b>
(j) Recycling (like bottles, cans, paper)				
(k) Visiting parks				
(l) Turning off lights more				
(m) Going camping				
(n) Asking my parents to choose paper over plastic bags				

22. How often do you do the following at home? Please choose one answer for each activity.

	<b>Almost all of the time</b>	<b>Sometimes</b>	<b>Once in a while</b>	<b>Not at all/ never</b>
(o) Changing light bulbs [for energy efficiency]				
(p) Taking hikes				
(q) Taking shorter showers/baths				
(r) Playing outside				

23. [Question included in wave 3 survey only] How important is it to you to . . . ? Please choose one answer for each activity.

	<b>Very important</b>	<b>Somewhat important</b>	<b>Not at all important</b>
(a) Be prepared for outdoor activities			
(b) Stay on trails during hikes			
(c) Leave rocks and other objects as you found them during outdoor activities			
(d) Respect wildlife			

24. Did you attend Operation Purple Camp this summer (2011)?

- Yes  
 No  
 Don't know

25. If accepted, would you be interested in attending Operation Purple Camp in 2012 (next summer)?

- Yes  
 No  
 Don't know

**All Youth**

26. [Question included in wave 2 survey only and posed to campers] How has Operation Purple helped you as a kid?

[Question included in wave 2 survey only and posed to non-campers] Where do you turn for help when you have concerns about your parent's deployment?

[Question included in wave 3 survey only and addressed to all youth] How do you think a camp like Operation Purple can help children and families?

Thank you for filling out this survey!





## Sample Weights

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This appendix presents the results of the propensity score sample weighting described in Chapter Two. We provide weights for the four samples (youth wave 2, youth wave 3, parent wave 2, and parent wave 3). We first provide weights for the full sample (Tables B.1–B.4), then we follow the same order for the subsetted analysis (youth who never attended camp before 2011; Tables B.5–B.8). Finally, we include comparisons of the respondents who responded to the open-ended questions with those who did not answer the questions (Tables B.9 and B.10).

**Table B.1**  
**Sample Weights, Full Sample: Wave 2 Youth**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.8	11.0	10.8
Air Force	0.24	0.12 <sup>a</sup>	0.16
Army	0.49	0.48	0.51
Coast Guard	0.02	0.02	0.02
Navy	0.07	0.18 <sup>a</sup>	0.13 <sup>a</sup>
Marine Corps	0.19	0.20	0.18
Active component	0.73	0.79	0.74
National Guard	0.14	0.12	0.14
Reserve component	0.12	0.09	0.12
Parent was deployed while youth was at camp (or during the same period)	0.48	0.34 <sup>a</sup>	0.48
Male	0.45	0.50	0.43
Number of prior deployments	3.2	3.4	3.0
Participated in other summer programs for military children	0.74	0.70	0.72
Previously attended an Operation Purple camp	0.22	0.52 <sup>a</sup>	0.30
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	2.1	2.1	2.1
When I feel upset or stressed out about my parent being deployed, I			
Talk to my parents about how I feel	2.6	2.7	2.7
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.8	2.8	2.9
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	3.0	2.9	3.0
Go outdoors for a walk or hike	2.8	2.9	3.0
Write my thoughts down in a journal or diary	3.1	3.2	3.2
Call or write my parent who is deployed to tell him/her how I feel	2.5	2.7	2.6
I try to find ways to help people who need help.	1.9	1.8	1.9
I feel like I am part of a community that supports me and my parents.	1.8	1.8	1.9
I have friends who are military kids that I can talk to about being a military kid.	2.0	1.9	2.0
I get nervous because I don't know about what my parent is doing during deployments.	2.1	2.0	2.0

Table B.1—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.2	2.3	2.3
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.8	1.7	1.8
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.5	2.3 <sup>a</sup>	2.5
I can ask my parents questions about the military and the war.	1.2	1.3	1.3
Other than my family members, I have talked with someone in the military about what their life is like.	2.1	2.0	2.1
Who serves our country? "I do."	0.20	0.21	0.19
How often do you do the following at home?			
Recycling	1.6	1.7	1.8
Visiting parks	2.0	2.1	2.0
Turning off lights more	1.9	1.8	1.8
Going camping	2.8	3.0	3.07 <sup>a</sup>
Asking my parents to choose paper over plastic bags	3.0	3.2	3.1
Changing light bulbs [for energy efficiency]	3.2	3.3	3.4
Taking hikes	2.6	2.7	2.7
Taking shorter showers/baths	2.2	2.3	2.3
Playing outside	1.4	1.5	1.5

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.2**  
**Sample Weights, Full Sample: Wave 3 Youth**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.8	11.0	10.9
Air Force	0.19	0.15	0.18
Army	0.52	0.54	0.53
Coast Guard	0.02	0.01	0.01
Navy	0.08	0.13 <sup>a</sup>	0.11
Marine Corps	0.20	0.17	0.17
Active component	0.70	0.77	0.73
National Guard	0.17	0.13	0.15
Reserve component	0.12	0.10	0.12
Parent was deployed while youth was at camp (or during the same period)	0.47	0.31 <sup>a</sup>	0.43
Male	0.46	0.48	0.44
Number of prior deployments	3.1	3.3	3.0
Participated in other summer programs for military children	0.74	0.71	0.73
Previously attended an Operation Purple camp	0.25	0.51 <sup>a</sup>	0.32
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	2.1	2.1	2.1
When I feel upset or stressed out about my parent being deployed, I			
Talk to my parents about how I feel	2.7	2.7	2.7
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.8	2.8	2.8
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	3.1	2.9 <sup>a</sup>	3.0
Go outdoors for a walk or hike	2.9	2.9	3.0
Write my thoughts down in a journal or diary	3.1	3.2	3.1
Call or write my parent who is deployed to tell him/her how I feel	2.6	2.7	2.7
I try to find ways to help people who need help.	1.8	1.8	1.9
I feel like I am part of a community that supports me and my parents.	1.8	1.8	1.8
I have friends who are military kids that I can talk to about being a military kid.	2.1	1.9	2.0
I get nervous because I don't know about what my parent is doing during deployments.	2.1	2.0	2.0

Table B.2—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.2	2.3	2.3
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.8	1.6	1.7
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.5	2.3 <sup>a</sup>	2.4
I can ask my parents questions about the military and the war.	1.2	1.3	1.3
Other than my family members, I have talked with someone in the military about what their life is like.	2.2	2.0 <sup>a</sup>	2.1
Who serves our country? "I do."	0.2	0.2	0.2
How often do you do the following at home?			
Recycling	1.7	1.6	1.6
Visiting parks	2.0	2.0	2.0
Turning off lights more	1.8	1.8	1.8
Going camping	2.8	2.9	3.0
Asking my parents to choose paper over plastic bags	3.0	3.1	3.1
Changing light bulbs [for energy efficiency]	3.2	3.3	3.3
Taking hikes	2.6	2.7	2.7
Taking shorter showers/baths	2.2	2.2	2.2
Playing outside	1.4	1.5	1.5

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.3**  
**Sample Weights, Full Sample: Wave 2 Parents**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.8	11.1	10.8
Air Force	0.20	0.14	0.17
Army	0.52	0.52	0.53
Coast Guard	0.02	0.01	0.01
Navy	0.07	0.14 <sup>a</sup>	0.11
Marine Corps	0.19	0.19	0.19
Active component	0.77	0.76	0.76
National Guard	0.14	0.12	0.13
Reserve component	0.09	0.12	0.11
Parent was deployed while youth was at camp (or during the same period)	0.45	0.32 <sup>a</sup>	0.39
Male (youth)	0.45	0.49	0.48
Number of prior deployments	3.3	3.4	3.2
Participated in other summer programs for military children	0.72	0.69	0.72
Previously attended an Operation Purple camp	0.24	0.49 <sup>a</sup>	0.31
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	2.2	2.2	2.2
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.8	1.8	1.8
When my child feels upset or stressed out about his/her parent being deployed, he/she			
Talks to me or his/her other parent about how he/she feels	2.3	2.3	2.3
Talks to friends (on the phone, email/text, or in person) about how he/she feels	3.0	2.9	2.9
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.2	3.1	3.1
Goes outdoors for a walk or hike	3.0	3.1	3.0
Writes his/her thoughts down in a journal or diary	3.2	3.2	3.2
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.7	2.6	2.6
My child tries to find ways to help people who need help.	1.8	1.9	1.8
My child feels like he/she is part of a community that cares about him/her and his/her parents.	2.0	1.9	1.9

Table B.3—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
My child has friends who are military kids that he/she can talk to about being a military kid.	2.1	2.0	2.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.2	2.2	2.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.4	2.4	2.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.8	1.6	1.7
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.3	2.4	2.4
My child can ask me and his/her deployed parent questions about the military and the war.	1.1	1.1	1.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.5	2.4	2.4
How often does your child do the following at home?			
Recycling	1.7	1.7	1.7
Visiting parks	2.0	2.0	1.9
Turning off lights more	2.2	2.2	2.2
Going camping	2.9	3.0	3.0
Asking his/her parents to choose paper over plastic bags	3.2	3.3	3.2
Changing light bulbs [for energy efficiency]	1.5	1.5	1.5
Taking hikes	3.4	3.5	3.5
Taking shorter showers/baths	2.7	2.8	2.7
Playing outside	2.5	2.4	2.5

<sup>a</sup> Indicates an ASMD greater than 0.2.



**Table B.4**  
**Sample Weights, Full Sample: Wave 3 Parents**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	11.0	11.0	10.9
Air Force	0.19	0.15	0.18
Army	0.52	0.55	0.53
Coast Guard	0.01	0.01	0.01
Navy	0.08	0.14 <sup>a</sup>	0.12
Marine Corps	0.20	0.15	0.17
Active component	0.74	0.76	0.78
National Guard	0.15	0.13	0.11
Reserve component	0.11	0.11	0.10
Parent was deployed while the youth was at camp (or during the same period)	0.48	0.30 <sup>a</sup>	0.43
Male (youth)	0.47	0.48	0.44
Number of prior deployments	3.4	3.3	3.3
Participated in other summer programs for military children	0.75	0.71	0.75
Previously attended an Operation Purple camp	0.25	0.50 <sup>a</sup>	0.31
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	2.2	2.3	2.2
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.8	1.9	1.8
When my child feels upset or stressed out about his/her parent being deployed, he/she			
Talks to me or his/her other parent about how he/she feels	2.3	2.2	2.2
Talks to friends (on the phone, email/text, or in person) about how he/she feels	3.0	2.9	2.8
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.2	3.1	3.1
Goes outdoors for a walk or hike	3.1	3.1	3.1
Writes his/her thoughts down in a journal or diary	3.2	3.2	3.2
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.6	2.6	2.6
My child tries to find ways to help people who need help.	1.8	1.8	1.8
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.9	1.9	1.9

Table B.4—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
My child has friends who are military kids that he/she can talk to about being a military kid.	2.1	2.0	2.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.2	2.2	2.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.3	2.3	2.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.7	1.6	1.6
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.3	2.3	2.2
My child can ask me and his/her deployed parent questions about the military and the war.	1.1	1.1	1.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.5	2.4	2.4
How often does your child do the following at home?			
Recycling	1.7	1.7	1.7
Visiting parks	1.9	2.0	1.9
Turning off lights more	2.1	2.2	2.2
Going camping	2.9	3.0	3.0
Asking his/her parents to choose paper over plastic bags	3.2	3.3	3.2
Changing light bulbs [for energy efficiency]	1.5	1.5	1.5
Taking hikes	3.5	3.5	3.5
Taking shorter showers/baths	2.7	2.8	2.7
Playing outside	2.5	2.5	2.6

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.5**  
**No Prior Camp Experience Subset: Wave 2 Youth**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.6	10.4	10.5
Air Force	0.23	0.14 <sup>a</sup>	0.18
Army	0.47	0.47	0.47
Coast Guard	0.02	0.01	0.02
Navy	0.06	0.22 <sup>a</sup>	0.12 <sup>a</sup>
Marine Corps	0.22	0.16	0.21
Active component	0.76	0.79	0.76
National Guard	0.13	0.11	0.13
Reserve component	0.11	0.11	0.12
Parent was deployed while youth was at camp (or during the same period)	0.54	0.40 <sup>a</sup>	0.54
Male	0.45	0.46	0.37
Number of prior deployments	3.1	2.9	2.9
Participated in other summer programs for military children	0.74	0.73	0.75
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	2.0	2.2	2.1
When I feel upset or stressed out about my parent being deployed, I			
Talk to my parents about how I feel	2.6	2.7	2.7
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.8	2.8	2.8
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	3.0	2.8	2.9
Go outdoors for a walk or hike	2.8	3.0 <sup>a</sup>	3.0 <sup>a</sup>
Write my thoughts down in a journal or diary	3.1	3.2	3.2
Call or write my parent who is deployed to tell him/her how I feel	2.5	2.6	2.5
I try to find ways to help people who need help.	1.8	1.9	1.8
I feel like I am part of a community that supports me and my parents.	1.8	1.9	1.9
I have friends who are military kids that I can talk to about being a military kid.	2.0	1.9	2.0
I get nervous because I don't know about what my parent is doing during deployments.	2.1	2.0	2.0
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.1	2.3 <sup>a</sup>	2.3 <sup>a</sup>

Table B.5—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.8	1.8	1.8
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.5	2.4	2.5
I can ask my parents questions about the military and the war.	1.2	1.3	1.2
Other than my family members, I have talked with someone in the military about what their life is like.	2.0	2.1	2.1
Who serves our country? "I do."	0.2	0.2	0.2
How often do you do the following at home?			
Recycling	1.6	1.7	1.8
Visiting parks	1.9	2.0	2.0
Turning off lights more	1.9	1.7 <sup>a</sup>	1.7 <sup>a</sup>
Going camping	2.9	3.2 <sup>a</sup>	3.1 <sup>a</sup>
Asking my parents to choose paper over plastic bags	3.0	3.0	3.0
Changing light bulbs [for energy efficiency]	3.2	3.4	3.4
Taking hikes	2.5	2.6	2.6
Taking shorter showers/baths	2.2	2.3	2.2
Playing outside	1.4	1.5	1.5

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.6**  
**No Prior Camp Experience Subset: Wave 3 Youth**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.5	10.5	10.4
Air Force	0.17	0.16	0.17
Army	0.50	0.54	0.50
Coast Guard	0.02	0.00	0.00
Navy	0.07	0.14 <sup>a</sup>	0.12
Marine Corps	0.24	0.16	0.21
Active component	0.74	0.77	0.77
National Guard	0.14	0.12	0.12
Reserve component	0.12	0.12	0.11
Parent was deployed while youth was at camp (or during the same period)	0.52	0.36 <sup>a</sup>	0.48
Male	0.45	0.43	0.40
Number of prior deployments	3.0	2.8	2.9
Participated in other summer programs for military children	0.75	0.72	0.74
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	2.1	2.2	2.1
When I feel upset or stressed out about my parent being deployed, I			
Talk to my parents about how I feel	2.7	2.7	2.7
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.9	2.8	2.8
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	3.1	2.8 <sup>a</sup>	3.0
Go outdoors for a walk or hike	2.8	3.0 <sup>a</sup>	3.0 <sup>a</sup>
Writes my thoughts down in a journal or diary	3.1	3.1	3.1
Call or write my parent who is deployed to tell him/her how I feel	2.6	2.8 <sup>a</sup>	2.8 <sup>a</sup>
I try to find ways to help people who need help.	1.8	1.9	1.9
I feel like I am part of a community that supports me and my parents.	1.8	1.8	1.8
I have friends who are military kids that I can talk to about being a military kid.	2.0	2.0	2.0
I get nervous because I don't know about what my parent is doing during deployments.	2.1	1.9	1.9
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.1	2.3 <sup>a</sup>	2.3 <sup>a</sup>

Table B.6—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.8	1.8	1.8
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.5	2.4	2.5
I can ask my parents questions about the military and the war.	1.2	1.3	1.2
Other than my family members, I have talked with someone in the military about what their life is like.	2.2	2.2	2.2
Who serves our country? "I do."	0.2	0.2	0.2
How often does your child do the following at home?			
Recycling	1.7	1.6	1.6
Visiting parks	1.9	2.0	2.0
Turning off lights more	1.8	1.8	1.8
Going camping	2.9	3.1 <sup>a</sup>	3.1 <sup>a</sup>
Asking my parents to choose paper over plastic bags	3.1	3.1	3.0
Changing light bulbs [for energy efficiency]	3.2	3.4	3.3
Taking hikes	2.6	2.7	2.7
Taking shorter showers/baths	2.2	2.2	2.2
Playing outside	1.4	1.5 <sup>a</sup>	1.5

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.7**  
**No Prior Camp Experience Subset: Wave 2 Parents**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.6	10.6	10.5
Air Force	0.19	0.16	0.19
Army	0.51	0.50	0.50
Coast Guard	0.02	0.01	0.01
Navy	0.06	0.16 <sup>a</sup>	0.10
Marine Corps	0.22	0.17	0.19
Active component	0.79	0.76	0.75
National Guard	0.13	0.13	0.14
Reserve component	0.09	0.10	0.10
Parent was deployed while youth was at camp (or during the same period)	0.54	0.37 <sup>a</sup>	0.46
Male (youth)	0.46	0.47	0.45
Number of prior deployments	3.2	3.1	3.2
Participated in other summer programs for military children	0.72	0.72	0.73
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	2.2	2.2	2.2
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.8	1.8	1.8
When my child feels upset or stressed out about his/her parent being deployed, he/she			
Talks to me or his/her other parent about how he/she feels	2.3	2.3	2.2
Talks to friends (on the phone, email/text, or in person) about how he/she feels	3.1	3.0	3.0
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.2	3.0 <sup>a</sup>	3.1
Goes outdoors for a walk or hike	3.1	3.0	3.0
Writes his/her thoughts down in a journal or diary	3.2	3.2	3.1
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.7	2.6	2.6
My child tries to find ways to help people who need help.	1.9	1.8	1.8
My child feels like he/she is part of a community that cares about him/her and his/her parents.	2.0	1.9	1.9

Table B.7—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	2.0	2.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.2	2.2	2.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.3	2.4	2.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.7	1.6	1.6
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.3	2.4	2.4
My child can ask me and his/her deployed parent questions about the military and the war.	1.1	1.1	1.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.6	2.5	2.5
How often does your child do the following at home?			
Recycling	1.7	1.8	1.8
Visiting parks	1.9	1.9	1.9
Turning off lights more	2.1	2.2	2.2
Going camping	3.0	3.0	3.0
Asking his/her parents to choose paper over plastic bags	3.3	3.2	3.3
Changing light bulbs [for energy efficiency]	1.5	1.4	1.4
Taking hikes	3.5	3.6	3.6
Taking shorter showers/baths	2.6	2.7	2.7
Playing outside	2.4	2.4	2.5

<sup>a</sup> Indicates an ASMD greater than 0.2.



**Table B.8**  
**No Prior Camp Experience Subset: Wave 3 Parents**

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
Applicant age (years)	10.7	10.6	10.5
Air Force	0.20	0.16	0.19
Army	0.49	0.52	0.50
Coast Guard	0.01	0.01	0.00
Navy	0.08	0.16 <sup>a</sup>	0.10
Marine Corps	0.22	0.16	0.20
Active component	0.78	0.79	0.79
National Guard	0.12	0.10	0.10
Reserve component	0.10	0.11	0.11
Parent was deployed while youth was at camp (or during the same period)	0.54	0.34 <sup>a</sup>	0.45
Male (youth)	0.47	0.43	0.42
Number of prior deployments	3.2	3.0	3.1
Participated in other summer programs for military children	0.76	0.74	0.76
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	2.2	2.3	2.2
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.8	1.9	1.9
When my child feels upset or stressed out about his/her parent being deployed, he/she			
Talks to me or his/her other parent about how he/she feels	2.3	2.3	2.2
Talks to friends (on the phone, email/text, or in person) about how he/she feels	3.1	2.9 <sup>a</sup>	2.9
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.2	3.0 <sup>a</sup>	3.1
Goes outdoors for a walk or hike	3.1	3.1	3.1
Writes his/her thoughts down in a journal or diary	3.2	3.1	3.1
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.6	2.6	2.6
My child tries to find ways to help people who need help.	1.8	1.8	1.7
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.9	1.9	1.9

Table B.8—Continued

Variable	Camp Mean	No-Camp Group	
		Unweighted	Weighted
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	1.9	1.9
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.2	2.2	2.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.3	2.4	2.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.7	1.6	1.6
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.3	2.3	2.2
My child can ask me and his/her deployed parent questions about the military and the war.	1.1	1.1	1.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.5	2.5	2.5
How often does your child do the following at home?			
Recycling	1.7	1.8	1.7
Visiting parks	1.9	2.0	1.9
Turning off lights more	2.1	2.2	2.1
Going camping	3.0	3.1	2.9
Asking his/her parents to choose paper over plastic bags	3.2	3.3	3.2
Changing light bulbs [for energy efficiency]	1.5	1.5	1.4
Taking hikes	3.5	3.5	3.5
Taking shorter showers/baths	2.6	2.8 <sup>a</sup>	2.7
Playing outside	2.5	2.5	2.5

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.9**  
**Comparison by Open-Ended Question Response Type: Youth**

Variable	Wave 2		Wave 3	
	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)
Applicant age (years)	10.9 (2.2)	11.2 (2.2)	11.0 (2.1)	10.7 (2.3)
Air Force	0.19 (0.39)	0.11 (0.32)	0.19 (0.39)	0.08 (0.27) <sup>a</sup>
Army	0.47 (0.5)	0.55 (0.5)	0.52 (0.5)	0.58 (0.49)
Coast Guard	0.02 (0.15)	0 (0)	0.02 (0.13)	0 (0)
Navy	0.13 (0.33)	0.11 (0.32)	0.1 (0.3)	0.12 (0.33)
Marine Corps	0.19 (0.39)	0.23 (0.42)	0.18 (0.38)	0.22 (0.41)
Active component	0.77 (0.42)	0.68 (0.47) <sup>a</sup>	0.74 (0.44)	0.73 (0.44)
National Guard	0.13 (0.33)	0.18 (0.39)	0.15 (0.36)	0.16 (0.37)
Reserve component	0.11 (0.31)	0.14 (0.34)	0.12 (0.32)	0.11 (0.31)
Parent was deployed while youth was at camp (or during the same period)	0.40 (0.49)	0.47 (0.51)	0.39 (0.49)	0.35 (0.48)
Male	0.48 (0.5)	0.46 (0.5)	0.47 (0.5)	0.46 (0.5)
Number of prior deployments	1.8 (0.7) <sup>a</sup>	2.1 (0.9)	1.9 (0.8)	1.8 (0.8)
Participated in other summer programs for military children	2.7 (0.9) <sup>a</sup>	3.0 (0.9)	2.7 (0.9)	2.7 (0.8)
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	3.0 (1.0)	3.2 (1.0)	3.0 (1.0)	3.0 (0.9)
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	2.5 (0.9) <sup>a</sup>	3.0 (0.8)	2.5 (0.9) <sup>a</sup>	2.73 (0.8)
When my child feels upset or stressed out about his/her parent being deployed, he/she				
Talks to me or his/her other parent about how he/she feels	2.7 (1.0) <sup>a</sup>	3.0 (1.0)	2.7 (0.9)	2.9 (0.9)
Talks to friends (on the phone, email/text, or in person) about how he/she feels	2.8 (1.02)	2.8 (1.09)	2.8 (1.0)	2.71 (1.0)
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	1.9 (0.7) <sup>a</sup>	2.1 (0.7)	2.0 (1.0)	1.9 (1.0)
Goes outdoors for a walk or hike	2.1 (0.8) <sup>a</sup>	2.8 (0.9)	2.2 (0.9)	2.2 (0.8)
Writes his/her thoughts down in a journal or diary	2.1 (1.0) <sup>a</sup>	2.5 (1.1)	2.1 (1.0)	2.2 (1.0)
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	1.7 (0.7) <sup>a</sup>	2.1 (0.6)	1.7(0.7) <sup>a</sup>	1.9 (0.5)
My child tries to find ways to help people who need help.	1.7 (0.7) <sup>a</sup>	1.9 (0.6)	1.7 (0.7)	1.7 (0.5)

Table B.9—Continued

Variable	Wave 2		Wave 3	
	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)
My child feels like he/she is part of a community that cares about him/her and his/her parents.	2.0 (0.7)	2.1 (0.8)	2.0 (0.7)	2.0 (0.8)
My child has friends who are military kids that he/she can talk to about being a military kid.	2.1 (0.6)	2.0 (0.6)	2.1 (0.7)	2.1 (0.6)
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	1.3 (0.5) <sup>a</sup>	1.5 (0.6)	1.3 (0.5)	1.3 (0.5)
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	1.9 (0.9) <sup>a</sup>	2.2 (0.8)	1.9 (0.9)	2.0 (0.8)
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	0.3 (0.5) <sup>a</sup>	0.1 (0.4)	0.3 (0.5) <sup>a</sup>	0.1 (0.4)
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	1.7 (0.8) <sup>a</sup>	2.3 (1.0)	1.7 (0.8)	1.8 (0.8)
My child can ask me and his/her deployed parent about the military and the war.	1.6 (0.9) <sup>a</sup>	2.1 (1.2)	1.6 (0.9)	1.73 (1.1)
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.0 (0.7) <sup>a</sup>	2.3 (0.7)	2.0 (0.74)	2.1 (0.8)
How often does your child do the following at home?				
Recycling	1.8 (0.8) <sup>a</sup>	2.1 (0.8)	1.8 (0.8) <sup>a</sup>	2.0 (0.8)
Visiting parks	2.8 (0.9)	3.0 (1.0)	2.9 (0.8) <sup>a</sup>	2.5 (1.0)
Turning off lights more	3.0 (1.1) <sup>a</sup>	3.3 (1.0)	3.0 (1.1)	3.2 (1.1)
Going camping	3.1 (1.0) <sup>a</sup>	3.3 (0.9)	3.1 (1.0)	3.1 (0.9)
Asking his/her parents to choose paper over plastic bags	2.6 (0.8) <sup>a</sup>	3.0 (1.0)	2.6 (0.8) <sup>a</sup>	2.8 (1.0)
Changing light bulbs [for energy efficiency]	2.2 (0.9)	2.1 (0.7)	2.2 (0.9)	2.2 (0.9)
Taking hikes	1.5 (0.6) <sup>a</sup>	1.7 (0.7)	1.5 (0.6)	1.5 (0.6)
Taking shorter showers/baths	3.3 (2.0) <sup>a</sup>	2.7 (1.8)	3.2 (1.9)	2.9 (1.9)
Playing outside	0.7 (0.5) <sup>a</sup>	0.9 (0.3)	0.7 (0.5)	0.8 (0.4)
Previously attended an Operation Purple camp	0.4 (0.5)	0.3 (0.5)	0.4 (0.5)	0.4 (0.5)

<sup>a</sup> Indicates an ASMD greater than 0.2.

**Table B.10**  
**Comparison by Open-Ended Question Response Type: Parents**

Variable	Wave 2		Wave 3	
	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)
Applicant age (years)	11.0 (2.2)	11.0 (2.3)	11.0 (2.2)	10.9 (2.1)
Air Force	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)
Army	0.5 (0.5) <sup>a</sup>	0.6 (0.5)	0.5 (0.5)	0.5 (0.5)
Coast Guard	0.0 (0.1)	0.0 (0.2)	0.0 (0.1)	0.0 (0.2) <sup>a</sup>
Navy	0.1 (0.3)	0.1 (0.2)	0.1 (0.3)	0.1 (0.3)
Marine Corps	0.2 (0.4)	0.1 (0.3)	0.2 (0.4)	0.2 (0.4)
Active component	0.8 (0.4)	0.7 (0.5)	0.8 (0.4)	0.8 (0.4)
National Guard	0.1 (0.3)	0.2 (0.4)	0.1 (0.4)	0.1 (0.3)
Reserve component	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)
Parent was deployed while youth was at camp (or during the same period)	0.4 (0.5)	0.2 (0.4) <sup>a</sup>	0.4 (0.5)	0.4 (0.5)
Male (youth)	0.5 (0.5) <sup>a</sup>	0.6 (0.5)	0.5 (0.5)	0.4 (0.5)
Number of prior deployments	3.4 (2.0)	2.9 (1.8) <sup>a</sup>	3.3 (2.0)	3.1 (2.1)
Participated in other summer programs for military children	0.7 (0.5) <sup>a</sup>	0.8 (0.4)	0.7 (0.5)	0.8 (0.4)
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	2.0 (0.7)	2.0 (0.8)	2.0 (0.7)	2.0 (0.7)
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.7 (0.6)	1.7 (0.6)	1.7 (0.6)	1.7 (0.6)
When my child feels upset or stressed out about his/her parent being deployed, he/she				
Talks to me or his/her other parent about how he/she feels	2.1 (0.8)	2.2 (0.8)	2.1 (0.8)	2.0 (0.8) <sup>a</sup>
Talks to friends (on the phone, email/text, or in person) about how he/she feels	2.7 (1.0)	2.6 (1.0)	2.7 (1.0)	2.6 (0.9)
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.0 (0.9) <sup>a</sup>	3.3 (0.9)	3.0 (1.0)	2.8 (1.1) <sup>a</sup>
Goes outdoors for a walk or hike	3.0 (0.8) <sup>a</sup>	3.2 (0.9)	3.0 (0.8)	3.0 (0.9)
Writes his/her thoughts down in a journal or diary	3.1 (0.9) <sup>a</sup>	3.3 (1.0)	3.1 (0.9)	3.0 (0.9)
Calls or writes his/her parent who is deployed to tell him/her how he/she feel	2.6 (0.9) <sup>a</sup>	2.9 (0.8)	2.6 (0.8)	2.4 (0.9) <sup>a</sup>
My child tries to find ways to help people who need help.	1.7 (0.8)	1.8 (0.8)	1.8 (0.8)	1.6 (0.7)

Table B.10—Continued

Variable	Wave 2		Wave 3	
	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)	Responded to Open-Ended Question, Mean (SD)	Did Not Respond to Open-Ended Question, Mean (SD)
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.8 (0.6)	1.8 (0.7)	1.8 (0.6)	1.7 (0.6)
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0 (0.8)	2.0 (0.9)	2.0 (0.8)	1.8 (0.9) <sup>a</sup>
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.3 (0.6)	2.4 (0.7)	2.3 (0.6)	2.3 (0.6)
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.2 (0.6) <sup>a</sup>	2.0 (0.6)	2.2 (0.6)	2.2 (0.6)
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.6 (0.6)	1.6 (0.7)	1.6 (0.6)	1.5 (0.5)
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.1 (1.0) <sup>a</sup>	2.3 (1.0)	2.1 (1.0)	2.1 (1.0)
My child can ask me and his/her deployed parent about the military and the war.	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.2 (1.1)	2.5 (1.1)	2.3 (1.1)	2.3 (1.1)
How often does your child do the following at home?				
Recycling	1.6 (0.9) <sup>a</sup>	1.9 (1.0)	1.6 (0.9)	1.8 (1.1)
Visiting parks	1.9 (0.7) <sup>a</sup>	2.2 (0.8)	2.0 (0.7)	2.0 (0.7)
Turning off lights more	2.0 (0.9)	1.8 (1.0)	2.0 (0.9)	1.7 (1.0) <sup>a</sup>
Going camping	2.8 (0.9)	2.7 (0.8)	2.8 (0.9)	2.7 (1.0)
Asking his/her parents to choose paper over plastic bags	3.2 (1.1)	3.0 (1.0)	3.2 (1.0)	2.8 (1.3) <sup>a</sup>
Changing light bulbs [for energy efficiency]	3.4 (0.9)	3.2 (0.9) <sup>a</sup>	3.4 (0.9)	3.2 (1.0) <sup>a</sup>
Taking hikes	2.6 (0.8) <sup>a</sup>	2.8 (0.7)	2.7 (1.0)	2.7 (1.0)
Taking shorter showers/baths	2.5 (1.0)	2.3 (1.0)	2.5 (0.9)	2.4 (1.1)
Playing outside	1.6 (0.7)	1.7 (0.7)	1.6 (0.7)	1.5 (0.7)
Previously attended an Operation Purple camp	0.37 (0.5)	0.29 (0.5)	0.37 (0.5)	0.36 (0.5)

<sup>a</sup> Indicates an ASMD greater than 0.2.



## **Analytic Sample Characteristics**

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This appendix presents detailed tables comparing baseline, wave 2, and wave 3 youth and parent respondents on demographic characteristics and survey items (Tables C.1–C.4). Table C.5 provides an overview of the characteristics of the final analytic sample.



**Table C.1**  
**Comparison of Baseline, Wave 2, and Wave 3 Samples: Parents of Youth Who Attended Camp**

Variable	Baseline	Wave 2	Wave 3
Applicant age (years)	10.9	10.8	11.0
Air Force	0.20	0.20	0.19
Army	0.54	0.52	0.52
Coast Guard	0.01	0.02	0.01
Navy	0.07	0.07	0.08
Marine Corps	0.18	0.19	0.20
Active component	0.75	0.77	0.74
National Guard	0.15	0.14	0.15
Reserve component	0.10	0.09	0.11
Parent was deployed while youth was at camp (or during the same period)	0.46	0.45	0.48
Male (youth)	0.48	0.45	0.47
Number of prior deployments	3.30	3.28	3.35
Participated in other summer programs for military children	0.76	0.72	0.75
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.8	1.8	1.8
I know how to make my child feel better when he/she is stressed about deployment.	2.2	2.2	2.2
When my child feels upset or stressed out about his/her parent being deployed, he/she			
Talks to me or his/her other parent about how he/she feels	2.3	2.3	2.3
Talks to friends (on the phone, email/text, or in person) about how he/she feels	3.0	3.0	3.0
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.2	3.2	3.2
Goes outdoors for a walk or hike	3.0	3.0	3.1
Writes his/her thoughts down in a journal or diary	3.2	3.1	3.2
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.6	2.7	2.6
My child tries to find ways to help people who need help.	1.8	1.8	1.8
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.9	2.0	1.9
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	2.1	2.1

**Table C.1—Continued**

Variable	Baseline	Wave 2	Wave 3
My child gets nervous because he/she doesn't know what his/her deployed parent is doing during deployments.	2.1	2.2	2.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.4	2.4	2.3
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.8	1.7	1.7
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.3	2.3	2.3
My child can ask me and his/her deployed parent about the military and the war.	1.1	1.1	1.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.5	2.5	2.5
How often does your child do the following at home?			
Recycling	1.7	1.7	1.7
Visiting parks	1.9	1.9	1.9
Turning off lights more	2.1	2.1	2.1
Going camping	2.9	2.9	2.9
Asking his/her parents to choose paper over plastic bags	3.2	3.2	3.2
Changing light bulbs [for energy efficiency]	3.5	3.4	3.5
Taking hikes	2.7	2.7	2.7
Taking shorter showers/baths	2.5	2.5	2.5
Playing outside	1.5	1.5	1.5
Previously attended an Operation Purple camp	0.24	0.24	0.25

NOTE: There were no ASMDs greater than 0.2 between wave 2 or wave 3 responses and the baseline sample. There were no ASMDs greater than 0.2 when comparing wave 2 and wave 3 responses.

**Table C.2**  
**Comparison of Baseline, Wave 2, and Wave 3 Samples: Parents of Youth Who Did Not Attend Camp**

Variable	Baseline	Wave 2	Wave 3
Applicant age (years)	11.1	11.1	11.0
Air Force	0.14	0.14	0.15
Army	0.52	0.52	0.55
Coast Guard	0.01	0.01	0.01
Navy	0.15	0.14	0.14
Marine Corps	0.19	0.19	0.15
Active component	0.76	0.76	0.76
National Guard	0.14	0.12	0.13
Reserve component	0.10	0.12	0.11
Parent was deployed while youth was at camp (or during the same period)	0.32	0.32	0.30
Male (youth)	0.51	0.49	0.48
Number of prior deployments	3.2	3.4	3.3
Participated in other summer programs for military children	0.74	0.69	0.71
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.8	1.8	1.8
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	2.2	2.2	2.2
When my child feels upset or stressed out about his/her parent being deployed, he/she			
Talks to me or his/her other parent about how he/she feels	2.3	2.3	2.2
Talks to friends (on the phone, email/text, or in person) about how he/she feels	2.9	2.9	2.9
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.1	3.1	3.1
Goes outdoors for a walk or hike	3.0	3.1	3.1
Writes his/her thoughts down in a journal or diary	3.2	3.2	3.1
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.6	2.6	2.6
My child tries to find ways to help people who need help.	1.8	1.9	1.8
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.9	1.9	1.9
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	2.0	2.0

Table C.2—Continued

Variable	Baseline	Wave 2	Wave 3
My child gets nervous because he/she doesn't know what his/her deployed parent is doing during deployments.	2.2	2.2	2.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.4	2.4	2.3
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.7	1.6	1.6
My child tries to help other military kids feel better when they are nervous or stressed about their parent who is deployed.	2.3	2.3	2.3
My child can ask me and his/her deployed parent about the military and the war.	1.1	1.1	1.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.4	2.4	2.4
How often does your child do the following at home?			
Recycling	1.8	1.7	1.7
Visiting parks	2.0	2.0	2.0
Turning off lights more	2.2	2.2	2.2
Going camping	3.0	3.0	2.9
Asking his/her parents to choose paper over plastic bags	3.3	3.3	3.3
Changing light bulbs [for energy efficiency]	3.5	3.5	3.5
Taking hikes	2.8	2.8	2.8
Taking shorter shower/baths	2.4	2.4	2.5
Playing outside	1.5	1.5	1.5
Previously attended an Operation Purple camp	0.48	0.49	0.50

NOTE: There were no ASMDs greater than 0.2 between wave 2 or wave 3 responses and the baseline sample. There were no ASMDs greater than 0.2 between wave 2 and wave 3 responses.

**Table C.3**  
**Comparison of Baseline, Wave 2, and Wave 3 Samples: Youth Who Attended Camp**

Variable	Baseline	Wave 2	Wave 3
Applicant age (years)	10.9	10.8	10.8
Air Force	0.20	0.24	0.19
Army	0.54	0.49	0.52
Coast Guard	0.01	0.02	0.02
Navy	0.07	0.07	0.08
Marine Corps	0.18	0.19	0.20
Active component	0.75	0.73	0.70
National Guard	0.15	0.14	0.17
Reserve component	0.10	0.12	0.12
Parent was deployed while youth was at camp (or during the same period)	0.46	0.48	0.47
Male	0.48	0.45	0.46
Number of prior deployments	3.30	3.17	3.11
Participated in other summer programs for military children	0.76	0.74	0.74
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	2.0	2.1	2.0
When I feel upset or stressed out about my parent being deployed, I			
Talk to my parents about how I feel	2.7	2.6	2.7
Talk to my friends (on the phone, email/text, or in person) about I feel	2.9	2.8	2.8
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	3.0	3.0	3.1
Go outdoors for a walk or hike	2.9	2.8	2.9
Write my thoughts down in a journal or diary	3.2	3.1	3.1
Call or write my parent who is deployed to tell him/her how I feel	2.7	2.5	2.6
I try to find ways to help people who need help.	1.8	1.8	1.8
I feel like I am part of a community that supports me and my parents.	1.8	1.8	1.8
I have friends who are military kids that I can talk to about being a military kid.	2.0	2.0	2.1
I get nervous because I don't know about what my parent is doing during deployments.	2.0	2.1	2.0
I don't feel nervous about my parent when he/she deploys because I have seen equipment that protects him/her.	2.2	2.2	2.2

**Table C.3—Continued**

Variable	Baseline	Wave 2	Wave 3
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.8	1.8	1.8
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.4	2.5	2.5
I can ask my parents questions about the military and the war.	1.3	1.2	1.2
Other than my family members, I have talked with someone in the military about what their life is like.	2.1	2.1	2.2
Who serves our country? "I do."	0.17	0.20	0.20
How often do you do the following at home?			
Recycling	1.7	1.6	1.7
Visiting parks	2.0	2.0	2.0
Turning off lights more	1.9	1.9	1.8
Going camping	2.9	2.8	2.8
Asking my parents to choose paper over plastic bags	3.1	3.0	3.0
Changing light bulbs [for energy efficiency]	3.2	3.2	3.2
Taking hikes	2.7	2.6	2.6
Taking shorter showers/baths	2.3	2.2	2.2
Playing outside	1.4	1.4	1.4
Previously attended an Operation Purple camp	0.24	0.22	0.25

NOTE: There were no ASMDs greater than 0.2 between wave 2 or wave 3 responses and the baseline sample. There were no ASMDs greater than 0.2 when comparing wave 2 and wave 3 responses.

**Table C.4**  
**Comparison of Baseline, Wave 2, and Wave 3 Samples: Youth Who Did Not Attend Camp**

Variable	Baseline	Wave 2	Wave 3
Applicant age (years)	11.1	11.0	11.0
Air Force	0.14	0.12	0.15
Army	0.52	0.48	0.54
Coast Guard	0.01	0.02	0.01
Navy	0.15	0.18	0.13
Marine Corps	0.19	0.20	0.17
Active component	0.76	0.79	0.77
National Guard	0.14	0.12	0.13
Reserve component	0.10	0.09	0.10
Parent was deployed while youth was at camp (or during the same period)	0.32	0.34	0.31
Male	0.51	0.50	0.48
Number of prior deployments	3.20	3.36	3.27
Participated in other summer programs for military children	0.74	0.70	0.71
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	2.1	2.1	2.1
When I feel upset or stressed out about my parent being deployed, I			
Talk to my parents about how I feel	2.7	2.7	2.7
Talk to my friends (on the phone, email/text, or in person) about I feel	2.8	2.8	2.8
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	2.9	2.9	2.9
Go outdoors for a walk or hike	2.9	2.9	2.9
Write my thoughts down in a journal or diary	3.2	3.2	3.2
Call or write my parent who is deployed to tell him/her how I feel	2.7	2.7	2.7
I try to find ways to help people who need help.	1.9	1.8	1.8
I feel like I am part of a community that supports me and my parents.	1.8	1.8	1.8
I have friends who are military kids that I can talk to about being a military kid.	2.0	1.9	1.9
I get nervous because I don't know about what my parent is doing during deployments.	2.0	2.0	2.0
I don't feel nervous about my parent when he/she deploys because I have seen equipment that protects him/her.	2.3	2.2	2.3

**Table C.4—Continued**

Variable	Baseline	Wave 2	Wave 3
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.7	1.7	1.6
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.3	2.3	2.3
I can ask my parents questions about the military and the war.	1.2	1.3	1.3
Other than my family members, I have talked with someone in the military about what their life is like.	2.1	2.0	2.0
Who serves our country? "I do."	0.19	0.21	0.20
How often do you do the following at home?			
Recycling	1.7	1.7	1.6
Visiting parks	2.0	2.0	2.0
Turn off lights more	1.8	1.8	1.8
Going camping	2.9	3.0	2.9
Asking my parents to choose paper over plastic bags	3.2	3.2	3.1
Changing light bulbs [for energy efficiency]	3.3	3.3	3.3
Taking hikes	2.7	2.7	2.7
Taking shorter showers/baths	2.3	2.3	2.2
Playing outside	1.5	1.5	1.5
Previously attended an Operation Purple camp	0.48	0.52	0.51

NOTE: There were no ASMDs greater than 0.2 between wave 2 or wave 3 responses and the baseline sample. There were no ASMDs greater than 0.2 when comparing wave 2 and wave 3 responses.



**Table C.5**  
**Final Analytic Sample Characteristics**

Variable	Number (%)		
	Completed Baseline Survey (n = 977)	Completed Baseline and Wave 2 Surveys (n = 603)	Completed Baseline and Wave 3 Surveys (n = 597)
Deployed servicemember characteristics			
Service			
Army	512 (52)	317 (53)	320 (54)
Navy	181 (19)	109 (18)	105 (18)
Air Force	163 (17)	105 (18)	102 (18)
Marine Corps	111 (11)	63 (11)	62 (10)
Coast Guard	10 (1)	9 (2)	8 (1)
Component			
Active	739 (76)	455 (75)	444 (74)
Reserve	99 (10)	65 (11)	66 (11)
National Guard	139 (14)	83 (14)	87 (15)
Number of prior deployments			
1	179 (19)	113 (20)	111 (19)
2	209 (22)	121 (21)	122 (21)
3 or more	552 (59)	344 (60)	343 (60)
Youth characteristics			
Male	485 (50)	282 (47)	279 (47)
Camp experience			
Attended an Operation Purple camp before 2011	370 (39)	216 (37)	224(37)
Attended an Operation Purple camp in 2011	432 (44)	290 (52)	293 (51)

## Outcome Tables: Communication About Feelings Theme

This appendix presents the results of our analysis of the communication about feelings theme. Tables D.1–D.8 reflect results from the analyses of the full sample, comparing weighted means and exploring improvement (“dichotomous” outcomes) as reported by youth and parents; Tables D.9–D.16 present results from the subsetted analyses of those who had not attended camp prior to 2011.

### Continuous Outcomes, Full Sample

In Tables D.1–D.4, lower mean values indicate better behavior (i.e., 1 = always).

**Table D.1**  
Communication, Continuous Outcomes, Full Sample: Wave 2 Youth

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent’s deployment.	1.8	0.8	1.9	0.7	0.4
I get nervous because I don’t know about what my parent is doing during deployments.	2.1	0.7	2.0	0.7	0.1
I don’t feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.0	0.7	2.1	0.6	0.9
I can ask my parents questions about the military and the war.	1.3	0.5	1.3	0.5	0.6
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	2.8	0.9	2.8	0.9	0.9
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.8	1.0	2.7	1.0	0.4
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	2.3	0.8	2.2	0.8	0.4
Write my thoughts down in a journal or diary	3.1	1.0	3.0	1.0	0.8
Call or write my parent who is deployed to tell him/her how I feel	2.4	0.9	2.6	0.9	0.1

**Table D.2**  
**Communication, Continuous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	1.7	0.7	1.9	0.7	0.0
I get nervous because I don't know about what my parent is doing during deployments.	2.1	0.6	2.0	0.6	0.3
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	1.9	0.6	2.1	0.7	0.1
I can ask my parents questions about the military and the war.	1.3	0.5	1.3	0.5	0.5
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	2.0	0.8	2.2	0.9	0.2
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.7	1.0	2.7	0.9	0.6
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	2.8	1.0	2.7	1.0	0.2
Write my thoughts down in a journal or diary	2.9	1.0	2.8	1.1	0.3
Call or write my parent who is deployed to tell him/her how I feel	3.0	1.0	2.9	1.0	0.2

**Table D.3**  
**Communication, Continuous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.9	0.7	2.1	0.7	0.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.6	0.6	1.9	0.7	0.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.3	0.6	2.2	0.6	0.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.2	0.6	2.3	0.6	0.2
My child can ask me and his/her deployed parent about the military and the war.	1.1	0.3	1.1	0.3	0.1
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	2.1	0.7	2.2	0.8	0.0
Talks to friends about how he/she feels	2.7	1.0	2.8	0.9	0.3
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.0	0.9	3.0	1.0	0.8
Writes his/her thoughts down in a journal or diary	3.1	0.9	3.1	0.9	0.7
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.6	0.8	2.6	0.9	0.4

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table D.4**  
**Communication, Continuous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.8	0.6	2.0	0.6	0.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.6	0.6	1.8	0.6	0.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.4	0.6	2.3	0.6	0.1
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.1	0.6	2.2	0.6	0.0
My child can ask me and his/her deployed parent about the military and the war.	1.1	0.3	1.1	0.3	0.7
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	2.1	0.7	2.2	0.8	0.0
Talks to friends about how he/she feels	2.7	0.9	2.6	0.9	0.4
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	2.9	0.9	2.8	0.9	0.2
Writes his/her thoughts down in a journal or diary	3.0	1.0	3.1	0.9	0.4
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.5	0.9	2.6	0.9	0.1

## Dichotomous Outcomes, Full Sample

Tables D.5–D.8 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses reporting improvement from the baseline to wave 2 or wave 3.

**Table D.5**  
**Communication, Dichotomous Outcomes, Full Sample: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent’s deployment.	0.37	0.48	0.28	0.45	0.2
I get nervous because I don’t know about what my parent is doing during deployments.	0.20	0.40	0.23	0.42	0.5
I don’t feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	0.24	0.43	0.35	0.48	0.1
I can ask my parents questions about the military and the war.	0.11	0.31	0.15	0.35	0.3
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	0.24	0.43	0.31	0.46	0.2
Talk to my friends (on the phone, email/text, or in person) about how I feel	0.27	0.44	0.36	0.48	0.1
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	0.51	0.50	0.48	0.50	0.7
Write my thoughts down in a journal or diary	0.26	0.44	0.30	0.46	0.4
Call or write my parent who is deployed to tell him/her how I feel	0.29	0.45	0.26	0.44	0.6

**Table D.6**  
**Communication, Dichotomous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	0.38	0.49	0.34	0.48	0.4
I get nervous because I don't know about what my parent is doing during deployments.	0.22	0.42	0.18	0.39	0.3
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	0.34	0.47	0.33	0.47	0.9
I can ask my parents questions about the military and the war.	0.12	0.33	0.13	0.34	0.8
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	0.26	0.44	0.30	0.46	0.4
Talk to my friends (on the phone, email/text, or in person) about how I feel	0.31	0.46	0.33	0.47	0.6
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	0.34	0.48	0.35	0.48	0.9
Write my thoughts down in a journal or diary	0.28	0.45	0.38	0.49	0.1
Call or write my parent who is deployed to tell him/her how I feel	0.33	0.47	0.38	0.49	0.3

**Table D.7**  
**Communication, Dichotomous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	0.38	0.49	0.25	0.43	0.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	0.28	0.45	0.15	0.36	0.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	0.13	0.34	0.16	0.36	0.4
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	0.28	0.45	0.26	0.44	0.6
My child can ask me and his/her deployed parent about the military and the war.	0.07	0.25	0.07	0.25	1.0
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	0.37	0.48	0.25	0.43	0.0
Talks to friends about how he/she feels	0.39	0.49	0.30	0.46	0.1
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	0.26	0.44	0.19	0.39	0.1
Writes his/her thoughts down in a journal or diary	0.27	0.44	0.23	0.42	0.3
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	0.28	0.45	0.22	0.41	0.2

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.



**Table D.8**  
**Communication, Dichotomous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	0.40	0.49	0.34	0.47	0.2
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	0.24	0.43	0.22	0.41	0.5
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	0.12	0.33	0.17	0.37	0.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	0.32	0.47	0.27	0.44	0.3
My child can ask me and his/her deployed parent about the military and the war.	0.06	0.24	0.05	0.22	0.6
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	0.38	0.49	0.27	0.44	0.0
Talks to friends about how he/she feels	0.39	0.49	0.42	0.49	0.6
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	0.31	0.46	0.36	0.48	0.4
Writes his/her thoughts down in a journal or diary	0.29	0.46	0.28	0.45	0.7
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	0.27	0.44	0.25	0.43	0.7

## Continuous Outcomes, Subsetted Sample (Non-Exposed Prior to 2011)

In Tables D.9–D.12, lower mean values indicate better behavior (i.e., 1 = always).

**Table D.9**  
**Communication, Continuous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	1.8	0.8	2.0	0.7	0.1
I get nervous because I don't know about what my parent is doing during deployments.	2.1	0.7	1.9	0.7	0.1
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.0	0.7	2.0	0.6	0.8
I can ask my parents questions about the military and the war.	1.2	0.5	1.3	0.4	0.8
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	2.8	0.9	2.8	0.9	1.0
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.8	1.0	2.5	1.0	0.1
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	2.2	0.8	2.1	0.7	0.4
Write my thoughts down in a journal or diary	3.0	1.0	2.9	1.0	0.4
Call or write my parent who is deployed to tell him/her how I feel	2.4	0.9	2.6	1.0	0.4

**Table D.10**  
**Communication, Continuous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	1.7	0.7	1.9	0.6	0.1
I get nervous because I don't know about what my parent is doing during deployments.	2.1	0.6	2.1	0.6	0.5
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	2.0	0.6	2.0	0.7	0.9
I can ask my parents questions about the military and the war.	1.3	0.6	1.3	0.5	0.4
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	2.1	0.8	2.2	0.9	0.3
Talk to my friends (on the phone, email/text, or in person) about how I feel	2.7	1.0	2.7	0.9	0.8
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	2.8	1.0	2.7	1.1	0.2
Write my thoughts down in a journal or diary	2.9	1.0	2.6	1.1	0.1
Call or write my parent who is deployed to tell him/her how I feel	3.0	1.0	2.8	1.0	0.2

**Table D.11**  
**Communication, Continuous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.8	0.6	2.1	0.7	0.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.6	0.6	1.9	0.7	0.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.4	0.6	2.3	0.6	0.2
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.2	0.6	2.2	0.6	0.6
My child can ask me and his/her deployed parent about the military and the war.	1.1	0.3	1.1	0.4	0.1
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	2.1	0.8	2.2	0.7	0.2
Talks to friends (on the phone, email/text, or in person) about how he/she feels	2.7	1.0	2.8	0.9	0.5
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	3.0	0.9	3.0	1.0	0.7
Writes his/her thoughts down in a journal or diary	3.1	0.9	3.0	1.0	0.5
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.6	0.8	2.6	0.9	1.0

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table D.12**  
**Communication, Continuous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	1.8	0.6	2.0	0.6	0.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	1.6	0.6	1.8	0.6	0.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	2.4	0.6	2.2	0.5	0.0
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	2.1	0.6	2.3	0.6	0.0
My child can ask me and his/her deployed parent about the military and the war.	1.1	0.3	1.1	0.3	0.6
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	2.0	0.7	2.2	0.8	0.1
Talks to friends (on the phone, email/text, or in person) about how he/she feels	2.7	0.9	2.6	0.9	0.4
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	2.9	0.9	2.7	0.9	0.2
Writes his/her thoughts down in a journal or diary	3.0	1.0	2.9	0.9	0.7
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	2.5	0.9	2.6	0.9	0.2

## Dichotomous Outcomes, Subsetted Sample (Non-Exposed Prior to 2011)

Tables D.13–D.16 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses reporting improvements from the baseline to wave 2 or wave 3.

**Table D.13**  
**Communication, Dichotomous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent’s deployment.	0.36	0.48	0.26	0.44	0.2
I get nervous because I don’t know about what my parent is doing during deployments.	0.20	0.40	0.23	0.42	0.7
I don’t feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	0.23	0.42	0.40	0.49	0.0
I can ask my parents questions about the military and the war.	0.12	0.33	0.13	0.34	0.9
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	0.18	0.38	0.31	0.47	0.1
Talk to my friends (on the phone, email/text, or in person) about how I feel	0.28	0.45	0.38	0.49	0.2
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	0.51	0.50	0.46	0.50	0.6
Write my thoughts down in a journal or diary	0.27	0.45	0.33	0.47	0.4
Call or write my parent who is deployed to tell him/her how I feel	0.28	0.45	0.26	0.44	0.7

**Table D.14**  
**Communication, Dichotomous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I know what to do to make myself feel better when I am nervous or stressed out about my parent's deployment.	0.39	0.49	0.32	0.47	0.3
I get nervous because I don't know about what my parent is doing during deployments.	0.22	0.42	0.13	0.33	0.0
I don't feel nervous about my parent when he/she deploys because I have seen the equipment that protects him/her.	0.30	0.46	0.38	0.49	0.2
I can ask my parents questions about the military and the war.	0.13	0.34	0.12	0.33	0.8
When I feel upset or stressed out about my parent being deployed, I					
Talk to my parents about how I feel	0.26	0.44	0.33	0.47	0.3
Talk to my friends (on the phone, email/text, or in person) about how I feel	0.35	0.48	0.34	0.48	1.0
Talk to a friend who is also a military kid (on the phone, email/text, or in person) about how I feel	0.34	0.48	0.38	0.49	0.6
Write my thoughts down in a journal or diary	0.29	0.46	0.42	0.50	0.1
Call or write my parent who is deployed to tell him/her how I feel	0.32	0.47	0.40	0.49	0.3

**Table D.15**  
**Communication, Dichotomous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	0.40	0.49	0.23	0.43	0.0
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	0.28	0.45	0.14	0.35	0.0
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	0.13	0.33	0.16	0.37	0.4
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	0.29	0.45	0.29	0.46	0.9
My child can ask me and his/her deployed parent about the military and the war.	0.07	0.26	0.07	0.25	0.9
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	0.37	0.48	0.25	0.44	0.0
Talks to friends (on the phone, email/text, or in person) about how he/she feels	0.41	0.49	0.34	0.48	0.3
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	0.26	0.44	0.21	0.41	0.3
Writes his/her thoughts down in a journal or diary	0.28	0.45	0.25	0.43	0.5
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	0.29	0.45	0.23	0.43	0.3

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.



**Table D.16**  
**Communication, Dichotomous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child knows what to do to make him/herself feel better when he/she is nervous or stressed out about his/her parent's deployment.	0.41	0.49	0.32	0.47	0.2
I know how to help my child feel better when he/she is feeling nervous or stressed out about his/her parent's deployment.	0.26	0.44	0.25	0.43	0.8
My child gets nervous because he/she doesn't know about what his/her deployed parent is doing during deployments.	0.13	0.34	0.18	0.39	0.3
My child doesn't feel nervous about his/her deployed parent when he/she deploys because my child has seen the equipment that protects his/her parent.	0.34	0.47	0.26	0.44	0.2
My child can ask me and his/her deployed parent about the military and the war.	0.06	0.24	0.05	0.22	0.7
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Talks to me or his/her other parent about how he/she feels	0.40	0.49	0.28	0.45	0.0
Talks to friends (on the phone, email/text, or in person) about how he/she feels	0.43	0.50	0.46	0.50	0.7
Talks to a friend who is also a military kid (on the phone, email/text, or in person) about how he/she feels	0.34	0.47	0.40	0.49	0.4
Writes his/her thoughts down in a journal or diary	0.32	0.47	0.32	0.47	1.0
Calls or writes his/her parent who is deployed to tell him/her how he/she feels	0.30	0.46	0.26	0.44	0.5

## Outcome Tables: Military Culture Theme

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This appendix presents the results of our analysis of the military culture theme. Tables E.1–E.8 reflect results from the analysis of the full sample, comparing weighted means and examining improvement (“dichotomous” outcomes) as reported by youth and parents; Tables E.9–E.16 present results from the subsetting analyses of those who had not attended camp prior to 2011.

### Continuous Outcomes, Full Sample

In Tables E.1–E.4, lower mean values indicate better behavior (1 = always).

**Table E.1**  
**Military Culture, Continuous Outcomes, Full Sample: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? “I do.”	0.32	0.47	0.27	0.45	0.3
I feel like I am part of a community that supports me and my parents.	1.7	0.7	1.8	0.7	0.5
I have friends who are military kids that I can talk to about being a military kid.	1.9	0.7	1.9	0.8	0.9
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.7	0.7	1.7	0.7	0.9
Other than my family members, I have talked with someone in the military about what their life is like.	1.8	0.9	2.1	0.9	0.0

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table E.2**  
**Military Culture, Continuous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? "I do."	0.30	0.46	0.29	0.45	0.76
I feel like I am part of a community that supports me and my parents.	1.7	0.6	1.7	0.6	0.6
I have friends who are military kids that I can talk to about being a military kid.	1.9	0.8	1.9	0.8	0.3
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.6	0.6	1.6	0.7	0.7
Other than my family members, I have talked with someone in the military about what their life is like.	1.9	0.8	2.0	0.9	0.2

**Table E.3**  
**Military Culture, Continuous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.8	0.6	1.9	0.7	0.2
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	0.8	2.1	0.9	0.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.6	0.6	1.7	0.6	0.2
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.2	1.2	2.4	1.1	0.0

**Table E.4**  
**Military Culture, Continuous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.8	0.6	1.8	0.6	0.4
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	0.8	1.9	0.7	0.2
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.6	0.6	1.6	0.6	0.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.2	1.1	2.0	1.1	0.2

## Dichotomous Outcomes, Full Sample

Tables E.5–E.8 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses that reporting improvement from the baseline to wave 2 or wave 3.

**Table E.5**  
**Military Culture, Dichotomous Outcomes, Full Sample: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? “I do.”	0.21	0.41	0.14	0.35	0.1
I feel like I am part of a community that supports me and my parents.	0.24	0.43	0.25	0.43	0.8
I have friends who are military kids that I can talk to about being a military kid.	0.25	0.43	0.18	0.39	0.2
I feel good talking about being a military kid with people in my school (teachers, other kids).	0.30	0.46	0.24	0.43	0.3
Other than my family members, I have talked with someone in the military about what their life is like.	0.36	0.48	0.21	0.41	0.0

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table E.6**  
**Military Culture, Dichotomous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? “I do.”	0.19	0.39	0.16	0.37	0.5
I feel like I am part of a community that supports me and my parents.	0.25	0.43	0.28	0.45	0.5
I have friends who are military kids that I can talk to about being a military kid.	0.24	0.43	0.27	0.44	0.6
I feel good talking about being a military kid with people in my school (teachers, other kids).	0.32	0.47	0.26	0.44	0.3
Other than my family members, I have talked with someone in the military about what their life is like.	0.36	0.48	0.30	0.46	0.2

**Table E.7**  
**Military Culture, Dichotomous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	0.27	0.45	0.16	0.36	0.0
My child has friends who are military kids that he/she can talk to about being a military kid.	0.19	0.40	0.14	0.35	0.1
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	0.26	0.44	0.18	0.38	0.0
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	0.34	0.47	0.29	0.46	0.3

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table E.8**  
**Military Culture, Dichotomous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	0.28	0.45	0.23	0.42	0.2
My child has friends who are military kids that he/she can talk to about being a military kid.	0.19	0.39	0.23	0.42	0.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	0.26	0.44	0.18	0.39	0.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	0.33	0.47	0.37	0.48	0.4

## Continuous Outcomes, Subsetted Sample (Non-Exposed Prior to 2011)

In Tables E.9–E.12, lower mean values indicate better behavior (1 = always).

**Table E.9**  
**Military Culture, Continuous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? "I do."	0.31	0.46	0.25	0.44	0.3
I feel like I am part of a community that supports me and my parents.	1.7	0.7	1.8	0.7	0.5
I have friends who are military kids that I can talk to about being a military kid.	1.9	0.7	1.9	0.8	0.8
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.7	0.7	1.7	0.7	0.9
Other than my family members, I have talked with someone in the military about what their life is like.	1.7	0.8	2.1	0.9	0.0

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table E.10**  
**Military Culture, Continuous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? "I do."	0.30	0.46	0.29	0.46	0.9
I feel like I am part of a community that supports me and my parents.	1.7	0.6	1.7	0.6	0.4
I have friends who are military kids that I can talk to about being a military kid.	1.9	0.7	1.8	0.8	0.1
I feel good talking about being a military kid with people in my school (teachers, other kids).	1.7	0.7	1.6	0.6	0.4
Other than my family members, I have talked with someone in the military about what their life is like.	1.9	0.8	2.0	0.8	0.4

**Table E.11**  
**Military Culture, Continuous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.8	0.6	1.9	0.7	0.2
My child has friends who are military kids that he/she can talk to about being a military kid.	2.0	0.8	2.0	0.9	0.6
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.6	0.6	1.7	0.6	0.2
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.1	1.2	2.4	1.1	0.0

**Table E.12**  
**Military Culture, Continuous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	1.7	0.6	1.8	0.6	0.1
My child has friends who are military kids that he/she can talk to about being a military kid.	1.9	0.8	1.8	0.7	0.4
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	1.5	0.6	1.6	0.6	0.2
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	2.2	1.1	2.0	1.0	0.2

### Dichotomous Outcomes, Subsampled Sample (Non-Exposed Prior to 2011)

Tables E.13–E.16 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” or from “sometimes” to “always.” Thus, the mean indicates the percentage of responses that reported improvement from the baseline to wave 2 or wave 3.

**Table E.13**  
**Military Culture, Dichotomous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? “I do.”	0.18	0.39	0.16	0.37	0.6
I feel like I am part of a community that supports me and my parents.	0.23	0.43	0.28	0.45	0.5
I have friends who are military kids that I can talk to about being a military kid.	0.23	0.42	0.19	0.40	0.6
I feel good talking about being a military kid with people in my school (teachers, other kids).	0.29	0.46	0.23	0.42	0.3
Other than my family members, I have talked with someone in the military about what their life is like.	0.35	0.48	0.18	0.38	0.0

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table E.14**  
**Military Culture, Dichotomous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
Who serves our country? "I do."	0.18	0.39	0.16	0.37	0.6
I feel like I am part of a community that supports me and my parents.	0.23	0.42	0.29	0.46	0.3
I have friends who are military kids that I can talk to about being a military kid.	0.25	0.44	0.31	0.47	0.4
I feel good talking about being a military kid with people in my school (teachers, other kids).	0.33	0.47	0.32	0.47	0.9
Other than my family members, I have talked with someone in the military about what their life is like.	0.33	0.47	0.34	0.48	0.8

**Table E.15**  
**Military Culture, Dichotomous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	0.29	0.45	0.15	0.36	0.0
My child has friends who are military kids that he/she can talk to about being a military kid.	0.20	0.40	0.11	0.32	0.0
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	0.26	0.44	0.15	0.36	0.0
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	0.38	0.49	0.30	0.46	0.2

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table E.16**  
**Military Culture, Dichotomous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child feels like he/she is part of a community that cares about him/her and his/her parents.	0.29	0.46	0.20	0.40	0.1
My child has friends who are military kids that he/she can talk to about being a military kid.	0.19	0.39	0.21	0.41	0.7
My child feels good talking about being a military kid with people in his/her school (teachers, other kids).	0.29	0.45	0.18	0.39	0.1
Other than my child's family members, he/she has talked with someone in the military about what their life is like.	0.35	0.48	0.42	0.50	0.3





## Outcome Tables: Sense of Service/Stewardship Theme

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This appendix presents the results of our analysis of the sense of service/stewardship theme. Tables F.1–F.8 reflect results from the analysis of the the full sample, comparing weighted means and examining improvement (“dichotomous” outcomes) as reported by youth and parents; Tables F.9–F.16 present results from the subsetted analyses of those who had not attended camp prior to 2011.

### Continuous Outcomes, Full Sample

In Tables F.1–F.4, lower mean values indicate better behavior (1 = always).

**Table F.1**  
Sense of Service, Continuous Outcomes, Full Sample: Wave 2 Youth

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	1.8	0.8	1.7	0.8	0.4
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.1	1.0	2.3	1.1	0.2

**Table F.2**  
Sense of Service, Continuous Outcomes, Full Sample: Wave 3 Youth

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	1.7	0.8	1.7	0.8	0.6
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.0	1.0	2.1	1.0	0.2

**Table F.3**  
**Sense of Service, Continuous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	1.7	0.8	1.8	0.8	0.2
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.0	0.9	2.2	1.1	0.1

**Table F.4**  
**Sense of Service, Continuous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	1.7	0.8	1.7	0.8	0.7
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.0	1.0	1.9	0.9	0.5

## Dichotomous Outcomes, Full Sample

Tables F.5–F.8 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses that reported improvement from the baseline to wave 2 or wave 3.

**Table F.5**  
**Sense of Service, Dichotomous Outcomes, Full Sample: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	0.28	0.45	0.31	0.46	0.7
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.38	0.49	0.34	0.47	0.5

**Table F.6**  
**Sense of Service, Dichotomous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	0.34	0.48	0.38	0.49	0.5
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.47	0.50	0.39	0.49	0.1

**Table F.7**  
**Sense of Service, Dichotomous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	0.27	0.44	0.20	0.40	0.1
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.32	0.47	0.33	0.47	0.9

**Table F.8**  
**Sense of Service, Dichotomous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	0.24	0.43	0.23	0.42	0.8
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.34	0.47	0.36	0.48	0.7

### Continuous Outcomes, Subsetted Sample (Non-Exposed Prior to 2011)

In Tables F.9–F.12, lower mean values indicate better behavior (1 = always).

**Table F.9**  
**Sense of Service, Continuous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	1.7	0.8	1.7	0.7	0.5
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.1	1.0	2.2	1.0	0.4

**Table F.10**  
**Sense of Service, Continuous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	1.7	0.8	1.7	0.8	0.9
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.0	1.0	2.1	1.0	0.7

**Table F.11**  
**Sense of Service, Continuous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	1.7	0.8	1.8	0.8	0.2
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.0	1.0	2.2	1.0	0.3

**Table F.12**  
**Sense of Service, Continuous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	1.7	0.7	1.7	0.8	0.9
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	2.0	1.0	1.9	0.9	0.5

### Dichotomous Outcomes, Subsetted Sample (Non-Exposed Prior to 2011)

Tables F.13–F.16 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses reporting improvement from the baseline to wave 2 or wave 3.

**Table F.13**  
**Sense of Service, Dichotomous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	0.31	0.46	0.30	0.46	0.9
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.34	0.48	0.35	0.48	0.9

**Table F.14**  
**Sense of Service, Dichotomous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
I try to find ways to help people who need help.	0.34	0.47	0.39	0.49	0.4
I try to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.44	0.50	0.36	0.48	0.2

**Table F.15**  
**Sense of Service, Dichotomous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	0.31	0.46	0.16	0.37	0.0
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.31	0.47	0.31	0.47	1.0

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table F.16**  
**Sense of Service, Dichotomous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
My child tries to find ways to help people who need help.	0.25	0.43	0.18	0.39	0.2
My child tries to help other military kids feel better when they are nervous or stressed out about their parent who is deployed.	0.35	0.48	0.36	0.48	0.9



## Outcome Tables: Outdoor Education Theme

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This appendix presents the results of our analysis of the outdoor education theme. Tables G.1–G.8 reflect results from the analysis of the full sample, comparing weighted means and examining improvement (“dichotomous” outcomes) as reported by youth and parents; Tables G.9–G.16 present results from the subsetted analyses of those who had not attended camp prior to 2011.

### Continuous Outcomes, Full Sample

In Tables G.1–G.4, lower mean values indicate better behavior (1 = always).

**Table G.1**  
Outdoor Education, Continuous Outcomes, Full Sample: Wave 2 Youth

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often do you do the following at home?					
Recycling	1.6	0.9	1.7	1.0	0.2
Visiting parks	2.0	0.8	2.1	0.7	0.7
Turning off lights more	1.8	0.8	1.8	0.8	0.7
Going camping	2.8	0.9	2.9	0.9	0.6
Asking my parents to choose paper over plastic bags	2.9	1.1	3.1	1.1	0.3
Changing light bulbs [for energy efficiency]	3.1	1.0	3.2	0.9	0.1
Taking hikes	2.6	0.8	2.7	0.9	0.5
Taking shorter showers/baths	2.1	0.9	2.2	0.8	0.2
Playing outside	1.5	0.6	1.5	0.7	0.7
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	2.6	0.9	2.8	0.8	0.1



**Table G.2**  
**Outdoor Education, Continuous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
In the last 3 months, how often have you been interested in doing outdoor activities, like hiking, riding a bike, or taking walks?	1.7	0.7	1.8	0.8	0.3
How often do you do the following at home?					
Recycling	1.7	0.9	1.7	0.9	0.8
Visiting parks	2.2	0.7	2.2	0.7	0.3
Turning off lights more	1.8	0.8	1.9	0.8	0.0
Going camping	3.0	0.9	3.0	0.9	0.7
Asking my parents to choose paper over plastic bags	3.0	1.1	3.0	1.1	0.9
Changing light bulbs [for energy efficiency]	3.1	0.9	3.1	1.0	0.9
Taking hikes	2.6	0.8	2.7	0.9	0.7
Taking shorter showers/baths	2.2	0.9	2.3	0.9	0.2
Playing outside	1.6	0.7	1.6	0.7	0.5
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	2.8	0.9	2.7	0.8	0.3
How important is it to you to					
Be prepared for outdoor activities	1.4	0.6	1.6	0.6	0.0
Stay on trails during hikes	1.5	0.7	1.5	0.6	0.2
Leave rocks and other objects where you found them during outdoor activities	1.5	0.6	1.7	0.7	0.0
Respect wildlife	1.1	0.3	1.1	0.3	0.6

**Table G.3**  
**Outdoor Education, Continuous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often does your child do the following at home?					
Recycling	1.7	0.9	1.6	0.9	0.8
Visiting parks	1.9	0.7	2.0	0.8	0.4
Turning off lights more	1.9	0.9	2.1	1.0	0.1
Going camping	2.7	0.9	2.9	0.9	0.0
Asking his/her parents to choose paper over plastic bags	3.2	1.0	3.1	1.1	0.6
Changing light bulbs [for energy efficiency]	3.3	0.9	3.4	0.9	0.5
Taking hikes	2.6	0.8	2.7	0.8	0.1
Taking shorter showers/baths	2.4	1.0	2.5	0.9	0.4
Playing outside	1.6	0.7	1.6	0.7	0.6
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	3.0	0.8	3.0	0.8	0.9

**Table G.4**  
**Outdoor Education, Continuous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
In the last 3 months, how often has your child been interested in doing outdoor activities, like hiking, riding a bike, and taking walks?					
	1.7	0.8	1.7	0.8	0.8
How often does your child do the following at home?					
Recycling	1.8	1.0	1.7	0.9	0.3
Visiting parks	2.1	0.7	2.1	0.7	0.9
Turning off lights more	2.1	0.9	2.2	1.0	0.3
Going camping	2.9	0.9	3.0	1.0	0.2
Asking his/her parents to choose paper over plastic bags	3.2	1.0	3.2	1.0	0.9
Changing light bulbs [for energy efficiency]	3.3	0.9	3.4	0.9	0.2
Taking hikes	2.6	0.8	2.8	0.9	0.1
Taking shorter showers/baths	2.5	1.0	2.6	1.0	0.4
Playing outside	1.7	0.7	1.7	0.7	0.3
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	2.8	0.9	2.8	0.8	0.6

## Dichotomous Outcomes, Full Sample

Tables G.5–G.8 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses reporting improvement from the baseline to wave 2 or wave 3.

**Table G.5**  
**Outdoor Education, Dichotomous Outcomes, Full Sample: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often do you do the following at home?					
Recycling	0.21	0.41	0.13	0.34	0.1
Visiting parks	0.19	0.39	0.19	0.40	0.9
Turning off lights more	0.26	0.44	0.21	0.41	0.3
Going camping	0.26	0.44	0.25	0.44	1.0
Asking my parents to choose paper over plastic bags	0.25	0.43	0.24	0.43	0.8
Changing light bulbs [for energy efficiency]	0.30	0.46	0.24	0.43	0.2
Taking hikes	0.27	0.45	0.21	0.41	0.2
Taking shorter showers/baths	0.35	0.48	0.28	0.45	0.2
Playing outside	0.13	0.34	0.10	0.30	0.3
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	0.34	0.47	0.31	0.47	0.7

**Table G.6**  
**Outdoor Education, Dichotomous Outcomes, Full Sample: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often do you do the following at home?					
Recycling	0.20	0.40	0.16	0.37	0.4
Visiting parks	0.14	0.34	0.15	0.36	0.7
Turning off lights more	0.30	0.46	0.20	0.40	0.0
Going camping	0.16	0.36	0.16	0.37	0.9
Asking my parents to choose paper over plastic bags	0.27	0.45	0.28	0.45	0.9
Changing light bulbs [for energy efficiency]	0.27	0.45	0.29	0.46	0.7
Taking hikes	0.25	0.43	0.24	0.43	0.8
Taking shorter showers/baths	0.28	0.45	0.27	0.45	1.0
Playing outside	0.10	0.31	0.14	0.34	0.4
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	0.34	0.47	0.40	0.49	0.2

**Table G.7**  
**Outdoor Education, Dichotomous Outcomes, Full Sample: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often does your child do the following at home?					
Recycling	0.14	0.35	0.18	0.38	0.3
Visiting parks	0.21	0.41	0.18	0.38	0.3
Turning off lights more	0.34	0.47	0.29	0.45	0.3
Going camping	0.30	0.46	0.22	0.41	0.0
Asking his/her parents to choose paper over plastic bags	0.23	0.42	0.22	0.42	0.7
Changing light bulbs [for energy efficiency]	0.23	0.42	0.21	0.41	0.5
Taking hikes	0.26	0.44	0.22	0.41	0.3
Taking shorter showers/baths	0.32	0.47	0.24	0.43	0.1
Playing outside	0.12	0.32	0.14	0.35	0.5
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	0.24	0.43	0.26	0.44	0.8

**Table G.8**  
**Outdoor Education, Dichotomous Outcomes, Full Sample: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often does your child do the following at home?					
Recycling	0.20	0.40	0.16	0.37	0.4
Visiting parks	0.14	0.34	0.15	0.36	0.7
Turning off lights more	0.30	0.46	0.20	0.40	0.0
Going camping	0.16	0.36	0.16	0.37	0.9
Asking his/her parents to choose paper over plastic bags	0.27	0.45	0.28	0.45	0.9
Changing light bulbs [for energy efficiency]	0.27	0.45	0.29	0.46	0.7
Taking hikes	0.25	0.43	0.24	0.43	0.8
Taking shorter showers/baths	0.28	0.45	0.27	0.45	1.0
Playing outside	0.10	0.31	0.14	0.34	0.4
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	0.34	0.47	0.40	0.49	0.2

## Continuous Outcomes, Subsetted Sample

In Tables G.9–G.12, lower mean values indicate better behavior (1 = always).

**Table G.9**  
Outdoor Education, Continuous Outcomes, Subset: Wave 2 Youth

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often do you do the following at home?					
Recycling	1.6	0.9	1.7	1.0	0.3
Visiting parks	2.0	0.7	2.0	0.7	0.8
Turning off lights more	1.8	0.7	1.8	0.8	0.9
Going camping	2.9	0.9	2.9	0.9	0.8
Asking my parents to choose paper over plastic bags	3.0	1.0	2.9	1.2	0.6
Changing light bulbs [for energy efficiency]	3.1	1.0	3.2	0.9	0.1
Taking hikes	2.5	0.8	2.6	0.8	0.5
Taking shorter showers/baths	2.1	0.9	2.2	0.8	0.2
Playing outside	1.4	0.5	1.5	0.6	0.4
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	2.6	0.9	2.8	0.8	0.1

**Table G.10**  
**Outdoor Education, Continuous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
In the last 3 months, how often have you been interested in doing outdoor activities, like hiking, riding a bike, or taking walks?	1.7	0.7	1.7	0.8	0.4
How often do you do the following at home?					
Recycling	1.7	0.9	1.6	0.8	0.3
Visiting parks	2.2	0.7	2.1	0.7	0.1
Turning off lights more	1.8	0.8	1.9	0.8	0.3
Going camping	3.0	0.8	2.9	1.0	0.8
Asking my parents to choose paper over plastic bags	3.1	1.0	2.9	1.1	0.2
Changing light bulbs [for energy efficiency]	3.2	0.9	3.1	1.1	0.5
Taking hikes	2.6	0.9	2.6	0.9	0.8
Taking shorter showers/baths	2.2	0.9	2.3	0.9	0.3
Playing outside	1.5	0.6	1.6	0.7	0.7
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	2.7	0.9	2.7	0.8	0.6
How important is it to you to					
Be prepared for outdoor activities	1.4	0.6	1.6	0.7	0.0
Stay on trails during hikes	1.4	0.6	1.5	0.6	0.2
Leave rocks and other objects where you found them	1.5	0.6	1.6	0.6	0.2
Respect wildlife	1.1	0.3	1.1	0.3	0.8

**Table G.11**  
**Outdoor Education, Continuous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often does your child do the following at home?					
Recycling	1.7	1.0	1.6	0.9	0.7
Visiting parks	1.9	0.7	1.9	0.8	0.7
Turning off lights more	1.8	0.9	2.0	1.0	0.1
Going camping	2.7	0.9	2.9	0.8	0.0
Asking his/her parents to choose paper over plastic bags	3.2	1.0	3.1	1.1	0.6
Changing light bulbs [for energy efficiency]	3.4	0.8	3.5	0.8	0.3
Taking hikes	2.5	0.8	2.7	0.9	0.2
Taking shorter showers/baths	2.4	1.0	2.4	0.9	0.7
Playing outside	1.5	0.7	1.5	0.7	0.9
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	3.0	0.8	3.0	0.8	1.0

**Table G.12**  
**Outdoor Education, Continuous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
In the last 3 months, how often has your child been interested in doing outdoor activities, like hiking, riding a bike, and taking walks?					
	1.7	0.8	1.6	0.7	0.8
How often does your child do the following at home?					
Recycling	1.8	1.0	1.6	0.9	0.2
Visiting parks	2.1	0.7	2.0	0.6	0.8
Turning off lights more	2.1	0.9	2.2	0.9	0.5
Going camping	2.9	0.9	2.9	1.0	0.7
Asking his/her parents to choose paper over plastic bags	3.3	1.0	3.1	1.1	0.3
Changing light bulbs [for energy efficiency]	3.4	0.9	3.5	0.9	0.5
Taking hikes	2.6	0.8	2.7	0.8	0.6
Taking shorter showers/baths	2.5	1.0	2.6	1.0	0.6
Playing outside	1.7	0.7	1.6	0.7	0.3
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	2.8	0.9	2.8	0.7	0.8



## Dichotomous Outcomes, Subsetted Sample

Tables G.13–G.16 show improvement from “not at all/never” to “sometimes,” from “not at all/never” to “always,” and from “sometimes” to “always.” Thus, the mean indicates the percentage of responses reporting improvement from the baseline to wave 2 or wave 3.

**Table G.13**  
**Outdoor Education, Dichotomous Outcomes, Subset: Wave 2 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often do you do the following at home?					
Recycling	0.23	0.42	0.14	0.35	0.1
Visiting parks	0.18	0.38	0.17	0.38	1.0
Turning off lights more	0.27	0.44	0.17	0.38	0.1
Going camping	0.27	0.45	0.24	0.43	0.6
Asking my parents to choose paper over plastic bags	0.27	0.45	0.26	0.44	0.8
Changing light bulbs [for energy efficiency]	0.31	0.46	0.23	0.42	0.3
Taking hikes	0.28	0.45	0.20	0.40	0.2
Taking shorter showers/baths	0.35	0.48	0.27	0.44	0.3
Playing outside	0.14	0.35	0.09	0.29	0.3
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	0.37	0.49	0.32	0.47	0.5

**Table G.14**  
**Outdoor Education, Dichotomous Outcomes, Subset: Wave 3 Youth**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often do you do the following at home?					
Recycling	0.20	0.40	0.17	0.38	0.6
Visiting parks	0.14	0.35	0.17	0.38	0.6
Turning off lights more	0.29	0.45	0.19	0.40	0.1
Going camping	0.18	0.39	0.21	0.41	0.7
Asking my parents to choose paper over plastic bags	0.28	0.45	0.33	0.47	0.5
Changing light bulbs [for energy efficiency]	0.26	0.44	0.30	0.46	0.5
Taking hikes	0.24	0.43	0.25	0.44	0.9
Taking shorter showers/baths	0.28	0.45	0.30	0.46	0.8
Playing outside	0.11	0.31	0.16	0.37	0.3
When I feel upset or stressed out about my parent being deployed, I					
Go outdoors for a walk or hike [to feel better]	0.36	0.48	0.45	0.50	0.2

**Table G.15**  
**Outdoor Education, Dichotomous Outcomes, Subset: Wave 2 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often does your child do the following at home?					
Recycling	0.15	0.36	0.20	0.40	0.3
Visiting parks	0.21	0.41	0.17	0.38	0.3
Turning off lights more	0.32	0.47	0.28	0.45	0.5
Going camping	0.33	0.47	0.18	0.39	0.0
Asking his/her parents to choose paper over plastic bags	0.25	0.43	0.23	0.42	0.7
Changing light bulbs [for energy efficiency]	0.23	0.42	0.19	0.39	0.3
Taking hikes	0.26	0.44	0.20	0.40	0.3
Taking shorter showers/baths	0.30	0.46	0.27	0.45	0.5
Playing outside	0.11	0.31	0.15	0.36	0.3
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	0.25	0.43	0.26	0.44	0.9

NOTE: Shading indicates statistically significant differences after adjustment for multiple testing.

**Table G.16**  
**Outdoor Education, Dichotomous Outcomes, Subset: Wave 3 Parents**

Variable	Camp Mean	Camp SD	No-Camp Mean	No-Camp SD	p-value
How often does your child do the following at home?					
Recycling	0.12	0.33	0.20	0.40	0.1
Visiting parks	0.13	0.33	0.15	0.36	0.6
Turning off lights more	0.25	0.43	0.23	0.42	0.7
Going camping	0.23	0.42	0.22	0.42	0.9
Asking his/her parents to choose paper over plastic bags	0.22	0.41	0.22	0.42	0.9
Changing light bulbs [for energy efficiency]	0.23	0.42	0.19	0.39	0.4
Taking hikes	0.26	0.44	0.21	0.41	0.4
Taking shorter showers/baths	0.27	0.45	0.27	0.45	1.0
Playing outside	0.10	0.30	0.10	0.30	0.9
When my child feels upset or stressed out about his/her parent being deployed, he/she					
Goes outdoors for a walk or hike [to feel better]	0.35	0.48	0.40	0.49	0.5

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